

A DICTIONARY

GEOGRAPHICAL, STATISTICAL, AND HISTORICAL

OF THE VARIOUS

COUNTRIES, PLACES, AND PRINCIPAL NATURAL
OBJECTS IN THE WORLD.

BY

J. R. M'CULLOCH.

NEW EDITION, CAREFULLY REVISED,

WITH THE STATISTICAL INFORMATION BROUGHT UP TO THE LATEST RETURNS

BY

FREDERICK MARTIN

AUTHOR OF 'THE STATESMAN'S YEAR-BOOK.'

IN FOUR VOLUMES.

VOL. IV.

LONDON :

LONGMANS, GREEN, AND CO.

1866.

LIST OF MAPS.



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A DICTIONARY

GEOGRAPHICAL, STATISTICAL, AND HISTORICAL.

POONAH

POONAH, a district of British India, presid. Bombay, principally between the 17th and 19th degs. of N. lat., and the 74th and 76th of E. long.; having N. Ahmednuggur, W. the Concan, S. the Sattarah dom., and E. those of the Nizam. Area, 8,281 sq. m. Pop. about 558,000. The face of the country is mountainous and irregular, but interspersed with many fertile and well-watered valleys. The climate is good and invigorating, and more suitable to Europeans than most parts of India. A good deal of the surface consists of the black and red cotton soils common in the S. of India: rice grounds comprise about 1-16th part of the land in cultivation, and gardens about 1-10th. The land is assessed on the village system. Poonah is the only city; but there are several other considerable towns, at which coarse woollen, cotton, and silk fabrics, and metallic ornaments are made. The celebrated cave-temples of Carlee, and several places of Hindoo pilgrimage, are in this district.

POONAH, a city of British India, presid. Bombay, formerly the cap. of the Mahratta dom., but now the cap. of the above distr.; on the Moolla, a tributary of the Beemah, 80 m. ESE. Bombay, on the railway from Bombay to Bellary. Pop. estimated at about 110,000. It stands in an extensive and bare plain, about 2,000 ft. above the sea, at the foot of a small insulated hill, crowned with a pagoda. It is without walls, and can neither lay claim to antiquity nor beauty; is very irregularly built and paved, with mean bazaars, deep ruinous streets, and no large or striking edifices. The principal palace is surrounded by high and thick walls, with four round towers, and is entered through a pointed archway. There are several other palaces, but they are small and insignificant. A little west of the city is the British cantonment, on an elevated site, with wide streets, a spacious church, a good station-library for the soldiers, and another library for the officers, and regimental schools, supported by subscription. This city has a Hindoo college, established in 1821, for 100 students, with classes for Hindoo divinity, medicine, metaphysics, mathematics, and astronomy, law, logic, rhetoric, and grammar. Poonah is the residence of the British collector and judge for the distr., and has a distr. jail, several British schools, and a Rom. Catholic church. East of the city is an excavated temple, apparently dedicated to Siva. Poonah is first

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PORT ESSINGTON

noticed in history early in the 17th century; but it did not become the permanent residence of the Mahratta sovereign till the middle of the 18th century. It came into British possession in 1818.

POPAYAN, a city of New Granada, cap. of the gov. of Cauca, on an extensive table-land, nearly 6,000 ft. above the sea, having the Cauca river, about a league distant, on the N., and a mountain named M, from its resemblance to that letter, on the E.; 230 m. SW. Bogota, and 235 m. NE. Quito; lat. 2° 28' 38" N., long. 76° 31' 30" W. Pop. estimated at 25,000. Like most Spanish-American cities, it is laid out on a perfectly regular plan, its broad streets being bordered with stone footways. The houses have for the most part only one story, and are usually built of unburnt brick. It has several squares, one of which is spacious and handsome; a cathedral and other churches; numerous conventual buildings, some of which are now converted into barracks, or appropriated to other uses, and was formerly the seat of a royal mint and of a tribunal of finance. Two bridges are thrown across the Molina, a tributary of the Cauca, which runs rapidly through the city, and drains it of its filth. Popayan is principally inhabited by negroes and mulattoes, the number of whom, a few years since, was double that of the whites. It was formerly the entrepôt of the trade between Bogota and Quito, and had a large traffic in the precious metals; but the revolution, by turning the trade into other channels, gave a blow to its prosperity, from which it has not hitherto recovered. It has still, however, some trade in woollen stuffs, salt, flour, sugar and cocoa; and its markets are always well supplied with provisions.

Popayan was the first city built by Europeans in this part of the New World, having been founded by Benalcazar in 1537. A considerable portion of the city was destroyed by an earthquake in 1827.

POPERINGEN, or **POPERINGHE**, a town of Belgium, prov. W. Flanders, cap. cant., on the Schipvaert canal, near the French frontier, 7 m. W. by N. Ypres. Pop. 11,160 in 1862. The town has several churches, a handsome town-hall and college, and some rather extensive woollen manufactures with oil-mills. It has also a considerable trade in hops.

PORT ESSINGTON, late a British settlement,

on a peninsula on the N. coast of Australia. The bay or port extends inland for 17 m. with a breadth varying from 2 to 6 m.; Victoria, the cap. on its W. side, being in lat. $11^{\circ} 17' S.$, long. $132^{\circ} 18' E.$ The latter was founded in 1839; but it would seem that the project for establishing a colony in this locality had been unwarily adopted. The country round the bay is of the most sterile description; and the bay itself, though excellent when entered, is, from the lowness of the shores and the number of reefs, difficult and dangerous to approach. These considerations led to the abandonment of the settlement in 1845.

PORT-GLASGOW, a parl. bor. and sea-port town of Scotland, co. Renfrew, on the S. side of the Frith of Clyde, 16 m. WNW. Glasgow, and 2 m. E. Greenock, on the Glasgow-Greenock railway. Pop. 7,214 in 1861. On the W. the town is flanked by a steep range of hills, about 400 ft. in height; and is, in fact, so much overshadowed by these hills, that the rays of the sun do not reach it for about 6 weeks in winter. The town is neat and regular; the streets, which are straight, for the most part cross each other at right angles; while the houses, which are generally lofty and substantial, have a pretty uniform appearance. The chief modern buildings are the town-house and par. church. The latter is ornamented in front with a portico, resting on 4 massy fluted pillars, and is surmounted with a handsome spire, rising from the centre. In addition to the par. church there is a *quoad sacra* chapel belonging to the establishment, and a chapel in connection with the Associate Synod. There are 8 schools, one of which is parochial; and another an endowed seminary, called Beaton's School, from the name of its founder. The most important branches of business are ship-building, and the manufacture of canvas for sail-cloth and coarse linen fabrics. The former gives employment to a large number of men. The building of steam-boats, some of them of the largest class, is extensively carried on.

Port-Glasgow was formerly the sea-port or deep-water harbour of the city of Glasgow, and was long regarded as a mere dependency of the latter. It has two capacious harbours, furnished with ample quay and shed room, together with a graving dock, the oldest in Scotland. A large and commodious wet-dock has also been constructed. Formerly the trade of this place was almost entirely carried on in ships belonging to merchants resident in Glasgow. Of late years, however, the people of Port-Glasgow have themselves become ship-owners, and at present the greater part of the shipping belonging to the port is owned by residents in the town. On the 1st of January, 1864, there belonged to the port 31 sailing vessels under 50, and 9 above 50 tons, besides 8 steamers, of an aggregate burthen of 889 tons. Port-Glasgow is the principal port on the Clyde for the importation of N. American timber, the quantity imported having varied during the last 15 years, from 16,000 to 30,000 tons a year. Owing to the great improvements that have been effected in the navigation of the Clyde, the greater part of the trade belonging to Glasgow that formerly centred in this port, has been transferred to the former. The customs' revenue has very materially decreased; a consequence of a large proportion of the goods formerly warehoused here being now carried direct to Glasgow. Thus the customs' revenue which, in 1830, amounted to 243,349*l.*, had sunk, in 1849, to 139,392*l.*, and, in 1860, to 54,621*l.* It rose, however, to 125,112*l.* in 1862, and to 140,174*l.* in 1863. More than half the trade of the port is with the British N. American possessions; about a fourth with the W. Indies;

and the remainder with the E. Indies, the Mediterranean, and the U. States. There is now little coasting trade between the town and Glasgow; but the numerous steam-boats that navigate the Clyde, except those that ply to comparatively distant ports, touch here in passing and re-passing.

The intercourse between Glasgow and its port was in the last century carried on principally by land; but the improvements effected in the Clyde navigation have been such as to make Glasgow all but independent of this or any other port, except its own. The ruins of the castle of Newark, which originally formed the seat of the proprietor of the estate on which Port-Glasgow is built, stands on the shore, immediately contiguous to the town on the E. In 1775 it was created a bor. of barony; and a municipal constitution was conferred on it. The Reform Act united it with Renfrew, Rutherglen, Dunbarton, and Kilmarnock, in sending 1 mem. to the H. of C. Registered voters, 241 in 1865. The corporation revenue amounted to 4,150*l.* in 1863-4. Market-day, Friday.

PORT MAJON, a sea-port of the island of Minorca, which see.

PORT-PATRICK, a sea-port town of Scotland, co. Wigtown, on a gentle declivity on the E. coast of the Irish Channel, bounded on the land side by hills which suddenly rise, in a semicircular form, to the height of 200 or 340 ft.; 109 m. SW. Edinburgh, and 21 m. NE. Donaghadee, Ireland, on the terminus of a branch line of the Glasgow-Carlisle railway. Pop. 1,206 in 1861. The principal street is in the form of a crescent, parallel to the bay; and there are 3 smaller streets connected with it, stretching at right angles towards the hills. The houses are, in general, well-built, comfortable, and covered with slate. With the exception of the par. church and of a free church, there are no public buildings, nor any other place of public worship, though there are dissenters of all kinds in the town and par. Education is at a low ebb; lower, perhaps, than in any other place of similar size in Scotland. There is a small parish library, and a still smaller one connected with the Sunday school. There are no manufactures, but the cod fishery is carried on to some extent.

Government steam-packets, in the service of the post office, used to ply between Portpatrick and Donaghadee. The shortness of the passage from the latter made Portpatrick, previously to the introduction of steam navigation, a principal port of entry, not merely for passengers coming from Ireland to Britain, but also for cattle exported from the former to the latter. But after a direct communication had been established between Ireland and Holyhead, Glasgow, Liverpool, and Bristol, the passage by Portpatrick fell off, though it is still a regular route, served by steamers. Formerly the harbour of Portpatrick was a mere inlet between two ridges of rocks, and was one of the worst and most dangerous on the W. of Scotland. Whenever a vessel approached the harbour, the inhabs. assembled to draw her to the beach, there being no quay or creek to afford shelter from the waves. But a quay and reflecting lighthouse were built about 80 years ago; and it having been determined to make the place a steam-packet station, a new harbour was constructed, protected by two piers, curved to resemble a horseshoe, and furnished with jetties near their extremities, by which the entrance was contracted to 180 ft., the area of the basin thus formed being about 7 acres. In accomplishing this great work, rock to an immense extent required to be excavated, which was effected by means of puddle-dikes and the diving-bell. The original estimate was 120,000*l.*, but the total expense exceeded 200,000*l.* After all,

however, the entrance to the harbour is very difficult in rough weather.

Portpatrick was long resorted to as the Gretna Green for Ireland, and was celebrated for its run-away, or irregular, marriages. The lowest sum charged was 10*l.*, payable to the parochial clergyman, who performed the marriage ceremony, and 1*l.* to the session-clerk. The practice was abandoned in 1826, owing to the interference of the church courts; but in the records of these marriages during the preceding period of 50 years, there occur the names of 198 gentlemen, 15 officers of the army or navy, and 13 noblemen.

PORT-AU-PRINCE, a city, and sea-port, and the modern cap. of the republic of Hayti, on the W. coast of the island, at the bottom of the Bay of Gonaïves, 90 m. S. Cape Haytien, and 165 m. W. St. Domingo; lat. 18° 33' 42" N., long. 72° 27' 11" W. Pop. variously estimated from 18,000 to 20,000. It is partially fortified on the land side, and the harbour is protected by a battery on a small island near the shore. The streets are laid out with great precision, crossing each other at nearly right angles, but the town is irregularly built: the houses are principally of wood, and as they seldom exceed 2 stories in height, have a paltry appearance. Except the palace, which is a large building, with a handsome flight of steps leading to good reception rooms, there are no public buildings of any importance. The arsenal, church, mint, lyceum, military hospital, and courts of law are all insignificant. The adjacent country is low and marshy, and the heat in the summer months being excessive, the climate is then exceedingly unhealthy. The entrance to the harbour is between White Island and the S. shore. The depth of water varies from about 18 ft. at ebb to 20 ft. at full tide. It is customary, but not compulsory, to employ a pilot in entering the harbour. Ships moor head and stern at from 100 to 500 yards from shore; loading and unloading by means of boats, as there are neither docks nor quays to facilitate these operations. The harbour is perfectly safe, except during hurricanes, which may be expected from Aug. to Nov. The markets are tolerably well supplied with beef, mutton, fowl, fruit, and vegetables; but the supply of fish is uncertain; and such is the indolence of the inhabs. and their neglect of the most obvious resources, that though turtle abound in the bay, they are rarely found in the markets.

Port-au-Prince is the seat of government, the supreme court of justice, court of cassation, and a tribunal of original jurisdiction. It is also the residence of the principal foreign consuls in Hayti, and the entrepôt of the commerce of the island, which, however, is trifling, compared to what it was previously to the commencement of the disturbances and atrocities that devastated this fine colony. (See HAYTI.) It is of late origin, having been founded in 1749. It is very subject to earthquakes, by one of which it was nearly destroyed in 1770.

PORT-ROYAL, a town and sea-port, and formerly the commercial capital of Jamaica; at the extremity of a narrow point of land, bounding Kingston harbour on the S. and E., about 5 m. SSW. Kingston. It formerly had 2,000 houses and was handsomely built; but having been in great part destroyed by an earthquake in 1602, and having subsequently suffered severely by fires and hurricanes, its public offices were transferred to Kingston, and it is now insignificant as a town. It is still, however, strongly fortified, and is the seat of the royal navy yard, the naval hospital, and of some regimental barracks.

PORTARLINGTON, a parl. bor. and inland

town of Ireland, prov. Leinster, on the Barrow, which divides it into two portions, the larger of which is in Queen's, and the smaller in King's co., 40 m. SW. by W. Dublin, on the Great Southern and Western railway. Pop. 2,389 in 1861. The town consists principally of a single street, nearly 2 m. in length, extending on both sides the river, which is here crossed by 2 stone bridges. Portarlinton is, perhaps, the best built and cleanest country town in Ireland. A considerable part of the distinguishing features of this town may be ascribable to the fact of a colony of French Protestant refugees having been settled in it by William III. It has two churches, in one of which, frequented by the refugees and their descendants, divine service was performed in the French language within the course of the present century. It has, also, 2 Rom. Catholic chapels, a Methodist meeting-house, a market-house, and a dispensary. The schools belonging to this town have long enjoyed a high reputation, especially those for French; and in them two of the most illustrious individuals of whom Ireland has had to boast, the Duke of Wellington and his brother the Marquis Wellesley, received the rudiments of their education. Under a charter of Charles II., in 1667, the corporation consisted of a sovereign, 2 portreeves, 12 burgesses, and a commonalty; but this body was dissolved by the Irish Municipal Act. The bor. returned 2 mems. to the Irish-H. of C. down to the Union, since which it has returned 1 mem. to the Imperial H. of C. Registered electors, 99 in 1865. An obelisk on a hill adjoining the town commands an extensive prospect. Manor courts and petty sessions are held here, and it has two constabulary stations, one in the portion of the town in each county. Markets on Wednesdays and Saturdays; fairs on 5th Jan., 1st Mar., Easter Monday, 22nd May, 4th July, 1st Sep., 12th Oct., and 23rd Nov.

The town, with an extensive surrounding district, was granted, in the reign of Charles II. to Lord Arlington (Sir H. Bennett, the Eliab of Dryden's Absalom and Achitophel), one of the famous CABAL. The town, which was previously called Cultodry, took the name of its new owner, the prefix Port being given to it in consequence of its having a small landing-place on the Barrow. Lord Arlington, however, soon afterwards sold the property; and, after passing through various hands, it was acquired by Mr. Dawson, an ancestor of the present Earl of Portarlinton. Emo House, the residence of this noble family, is about 4 m. S. from the town.

PORTLAND, a city and port of entry in the U. States, state Maine, of which, till 1832, it was the cap., on a peninsula in Casco Bay, 50 m. SSW. Augusta, and 50 m. NNE. Portsmouth. Pop. 26,340 in 1860. Portland is the largest town in the state, and is well built and laid out, having numerous churches, an elegant court-house, market, alms and custom houses, an atheneum, with a good library and several banks. The harbour has deep water, is safe and capacious, and is never frozen, except for a few days in the coldest winters. Its entrance is marked by a lighthouse, 70 ft. in height, on Cape Elizabeth, 3 m. S. by E. from the town. The town and harbour are protected by 2 forts. The inhabs. of Portland carry on an extensive coasting and foreign trade, and have a considerable share in the fisheries. There are numerous schools for children of either sex. The city was incorporated in 1786.

PORTLAND (ISLE OF), a large and almost insulated headland, on the S. coast of England, co. Dorset. It stretches lengthwise from N. to S. about 5 m., being concave on its W. and convex

on its E. side. Where widest it is nearly 2 m. across; area 2,970 acres. Pop. 8,468 in 1861. The island consists of a vast mass of freestone, rising in its highest point to about 450 ft. above the level of the sea. Its quarries, which have long been famous, have furnished the stone used in the building of St. Paul's cathedral and many other edifices. It has a village, several hamlets, a prison for convicts, with churches, schools, and two old castles. It is well watered, and the soil, though in most parts thin and light, is fertile, yielding fine herbage, with wheat and other grain, but not in sufficient quantities for the supply of the inhabs. The custom of gavelkind prevails in the island. Near its S. extremity, denominated 'Portland Bill,' in lat. $50^{\circ} 31' 22''$ N., long. $2^{\circ} 26' 49''$ W., are 2 lighthouses with fixed lights, elevated 198 ft. above high water. The 'Race of Portland' lies to the S. of the Bill. It is a rippling of the water, occasioned by the ruggedness of the ground, which impedes and breaks the course of the tide. At springs it is rather dangerous, at least for small loaded vessels. In the angle between the N. coast of the island and the opposite shore of the mainland, is Portland or Weymouth Roads, where there is excellent anchorage, with W. or N. winds, for the largest ships. But gales from the SSE., SE., and E., throw in a very heavy sea; and to protect the roads from their influence, a gigantic breakwater is now being constructed, for a notice of which see WEYMOUTH. The sea is perpetually encroaching on this island; and in 1665, 1734, and 1792, portions of the cliffs and of the land, having been undermined, fell into the sea, and sunk to a lower level. The Isle of Portland has been made a depôt for convicts, who are employed on the breakwater.

PORTO-BELLO, a famous sea-port and town of Colombia, on the Caribbean Sea, on the N. side of the isthmus uniting the two great continents of N. and S. America, at the point where it is less than 40 m. across; lat. $9^{\circ} 24' 29''$ N., long. $79^{\circ} 43' 35''$ W. The town, now greatly fallen off, is built along the shore, at the foot of a mountain range which surrounds and shelters the harbour. But this barrier, at the same time that it protects the port, prevents the circulation of the air, and, combined with the heavy periodical rains, the influence of the surrounding forests, and the excessive heat, renders this locality a favourite seat of yellow fever, and one of the most unhealthy places in the world. Owing, however, to the excellence of its port, which is one of the finest that can be imagined, and its contiguity to Panama, on the opposite side of the isthmus, it was, for a lengthened period, an important commercial entrepôt. Down to 1740, the galleons from Old Spain, with merchandise for the Spanish Main, Peru, and the W. coast of America, used to rendezvous at Porto-Bello, about the same time that the Peru fleet arrived at Panama, the gold and silver, and other produce brought by the latter, being conveyed across the isthmus by means of oxen and conversely. As soon as the galleons had unloaded, and the merchandise from Panama had arrived, a fair was held, which was attended by a great concourse of strangers, and when a deal of business was transacted. But in 1740 the galleons ceased to resort to Porto-Bello, the commerce with Peru and W. America having been since carried on direct by vessels that sailed round Cape Horn. In consequence, the importance of Porto-Bello rapidly declined; and the advantages of its port not being sufficient to countervail the unhealthiness of its climate, it is now comparatively deserted. But should the project for effecting a communication across the isthmus, by canal or railway, take effect,

it is probable that Porto-Bello may recover some portion of its former importance. The climate is said to have been improved by an opening made in the mountains that encircle the town, and by the cutting down of a portion of the adjacent forests.

Notwithstanding Porto-Bello was formerly very strongly fortified, it was taken, with little loss, by Admiral Vernon in 1739. The importance of this exploit, and the abilities of the admiral, were, at the time, much overrated; and it was supposed that if he were furnished with an adequate force he would have little difficulty in reducing all the Spanish settlements in this quarter. But the events that took place during the next two years, and especially the failure of the attack on Carthagena, undeceived the public.

Porto-Bello was discovered, in 1502, by Columbus, its name being derived from the excellence of its harbour.

PORTOBELLO, a parl. bor. and sea-port of Scotland, co. Mid Lothian, in a plain on the S. bank of the Frith of Forth, 2 m. E. Edinburgh, on the Edinburgh and Berwick railway. Pop. 4,366 in 1861; but in summer its pop., owing to the influx of visitors from Edinburgh, is much larger. The bor. has a chapel of ease attached to the establishment, a Free church, and chapels belonging to the Episcopalians, Independents, and Relief. The main street lies along the line of the public road running E. and W.; a number of cross streets diverge from it, leading down to the sea beach, or stretching in the opposite direction. Some of these consist of lines of detached villas. Separate villas, also, abound throughout the town, some of them fronting the sea. No fixed plan has been observed in laying out the town, which has a straggling appearance, and some of the older parts are very mean.

Adjacent to Portobello is the village of Joppa, now almost a part of it. There is no harbour at either place. There are manufactories of bricks, tiles, earthenware, glass, and crystal. Fire-clay abounds on the E. point of Joppa, where fire-bricks are manufactured to a considerable extent. It is estimated that the average number of visitors for sea-bathing in the town, from May to Oct., amounts to 500 or 600. And, owing to the salubrity of its situation, many families resort to it as an eligible permanent residence.

Portobello derives its name from the first house having been built by an individual who had been with Admiral Vernon, in 1739, at 'Portobello.' The Reform Act united it with Leith and Musselburgh in sending 1 mem. to the H. of C. Registered electors in the united bor. 2,501 in 1861. Municipal councillors, 9.

PORTO FERRAJO, a sea-port and the principal town of the island of Elba, which see.

PORTO-RICO (Span. *Puerto Rico*), one of the W. Indian Islands belonging to Spain, being the smallest and most E. of the Greater Antilles; chiefly between lat. $17^{\circ} 55'$ and $18^{\circ} 30'$ N., and long. $65^{\circ} 40'$ and $67^{\circ} 20'$ W.; having N. the Atlantic, and S. the Caribbean Sea, separated on the E. from the Virgin Islands by the Virgin Passage, and from Hayti on the W. by Mona Passage, 80 m. across. Its shape is that of a parallelogram, the length E. to W. being about 100 m., and the breadth about 38 m. Area, 3,700 sq. m. Under the old colonial system of Spain, in 1788, the pop. did not exceed 80,650; whereas it amounted, in 1860, according to the official returns, to 583,308, of whom 300,430 were 'pure whites,' and 282,878 coloured people. A mountain chain runs E. and W. through the centre of the island; the highest summit of which, at the NE. extremity, is about

3000 ft. in height. Numerous rivers have their sources in this chain, flowing on either side to the sea, some of which are navigable for 2 or 3 leagues from their mouth, for schooners and coasting vessels. The coast line is indented with numerous bays and creeks, some of which form excellent harbours for ships of large burden. The surface, which is finely diversified, is well watered, and the soil is generally rich and fertile. The climate is supposed to be less unhealthy, and better adapted to Europeans, than in most of the Antilles; it differs widely, however, in different parts; the N. coast being especially subject to heavy rains, and the S. to droughts. Violent hurricanes often do immense damage. Porto-Rico is singularly destitute of wild animals. There are no indigenous quadrupeds; and scarcely any of the feathered tribe are to be found in the forests. The birds are few both in number and species; and travellers may go whole leagues without seeing a bird or even hearing their chirp. On the rivers there are a few water-fowl, and in the forests the green parrot. Almost every other island in the W. Indies is infested by snakes, and other noxious reptiles. Here are none. But rats of an enormous size, and in great numbers, infest the country, and sometimes commit dreadful ravages on the sugar-canes; and although continually persecuted, their numbers do not decrease.

The resources of Porto-Rico are wholly agricultural; no manufactures exist, nor have any mines of gold or silver, or other mineral products, been hitherto explored.

Agriculture is in a very backward state, and the island suffers greatly from want of roads. Mr. Cowper, British consul at Porto-Rico, in his 'Report on the Trade of Porto-Rico for the Year, 1864' (Commercial Reports received at the Foreign Office, Oct. 1865), says, that 'if good roads were made throughout the country, the cultivation of the land would greatly increase, for at present a large amount of rich and fertile land in the interior is left uncultivated through the want of roads. The south coast of the island is generally occupied with sugar plantations, but most other parts of the island exhibit a promiscuous cultivation, plantations of sugar being intermixed with those of coffee, and with field-rice, maize, plantains, tobacco, and pasture. Artificial irrigation is nowhere practised; but notwithstanding the drought which prevails in the S., plenty of water for the cane is found at about 2 ft. below the surface. The average produce of sugar per acre, for the whole of Porto-Rico, is estimated at 30 cwt., being more than double the quantity raised on the best lands in the most favoured of the British Antilles. The coffee is of a peculiarly good quality, much care being taken in plucking and preparing it. The trees, which mostly belong to small proprietors, grow to a great height, and sometimes yield from 20 to 40 lbs. each. Every poor family has 20 or 30 trees; and even in the woods trees are to be found in a wild state, laden with coffee. The labourers at the harvest come into the market, some with 50 lbs., others with a cwt., and so on, being the surplus of their little crops, after leaving enough for the use of their families for the season. This they sell to the merchants, to purchase articles of clothing. The plant on the large estates is pruned and cut low, and yields, at an average, 1 lb. per tree. The tobacco of Porto-Rico, which is but little inferior to that of Cuba, is wholly the produce of free labour. Poor families, white and black, plant $\frac{1}{2}$ or $\frac{3}{4}$ acre, and cure and dispose of the produce to the shopkeepers in the villages, who are generally agents for the more extensive merchants of the capital. These shopkeepers sur-

nish clothes and money in advance, at an enormous interest, to the cultivators, from whom they receive their crop at a certain price, generally less than half its value. The soil in many places is particularly suitable for the growth of cotton, the culture of which has been very greatly extended within the last half dozen years. Indigo grows spontaneously, but is not cultivated; and few European vegetables are raised, though the greater number might be produced without difficulty.

The pasture lands in the N. and E. are superior to any in the W. Indies for breeding and fattening cattle. Cattle-breeding is, perhaps, more profitable here than any other branch of agriculture, but, owing to the subdivision of property, few individuals possess so many as 1,000 head of cattle. In the breeding districts, where there are no arable lands, the cattle are permitted to roam at large, as on the American continent, but on a smaller scale; elsewhere they are penned up in enclosed meadows. They are mostly reared in the valleys distant from the coast, whence the carriage of sugar and coffee would be too expensive for the cultivator. The larger proprietors, who have from 100 to 150 head, if they have not sufficient pasture land of their own, divide their stock among the poorer landowners, giving them cows, and calves already weaned, to be taken care of; and dividing the produce of the animals, when sold, with them, in a certain proportion. The cattle are turned into the fattening pastures at a year old, and in 3 or 4 months are fit for sale. A considerable traffic has long been carried on in cattle from this island with the French, English, and Danish W. I. Islands; for, in consequence of their being tamer, they are easier managed on board ship, and are not so liable to die or fall off at sea as the wilder cattle of the American continent. The home supplies of cheese and butter are insufficient for the consumption. The island is not adapted for wool growing, the fleece of the sheep degenerating into a species of hair; but the mutton is excellent. The numbers of sheep, goats, hogs, mules, and asses are, however, very limited; but there are, probably, above 80,000 horses of a tolerably good breed. The forests in the interior supply timber of the best quality for ship and house building; and to prevent their decrease, the government has ordered that three trees should be planted for every one cut down.

Previously to 1815, Porto-Rico, being excluded from all direct intercourse with other countries excepting Old Spain, was either stationary or but slowly progressive, the entire value of the exports in that year having amounted to only 65,274 dollars. But at that epoch a royal decree appeared, which exempted the trade between Spain and the Spanish colonies and Porto-Rico from all duties for 15 years; and she was then, also, permitted to carry on a free trade, under reasonable duties, with other countries. In consequence principally of these liberal measures, but partly also, of a considerable immigration of rich Spanish colonists from S. America, Porto-Rico has latterly made a most extraordinary progress. Great improvements have been effected in the police and internal administration, and roads have been constructed in some parts of the island. 'But at present,' says Mr. Cowper, writing in 1865, 'there are no railways, canals, drains, telegraphs, or waterworks, all of which are greatly needed to ensure the health, happiness, and prosperity of the people. None of these can be done without foreigners and their capital: of this the Spanish gov. is well aware.'

The following table, taken from the official report of Mr. Cowper, British consul at Porto-Rico, shows the value of the imports and exports of the

different ports of the island of Porto-Rico in the year 1864:—

| IMPORTATION | | EXPORTATION | |
|---------------|---------------|---------------|--------------|
| Ports | Total | Ports | Total |
| | Dolla. Cts. | | Dolla. Cts. |
| Porto-Rico | 4,679,292 89 | Porto-Rico | 925,597 72 |
| Mayaguez | 2,376,711 21 | Mayaguez | 971,646 06 |
| Ponce | 3,564,774 69 | Ponce | 822,309 49 |
| Aguadilla | 518,497 35 | Aguadilla | 341,679 55 |
| Arroyo | 440,364 52 | Arroyo | 449,691 87 |
| Naguabo | 187,133 66 | Naguabo | 316,152 70 |
| Arecibo | 155,826 09 | Arecibo | 331,921 51 |
| | | Humacao | 264,395 78 |
| | | Pagardo | 201,176 82 |
| | | Guayanilla | 105,397 35 |
| | | Salinas | 57,613 50 |
| Total in 1864 | 9,932,600 41 | Total in 1864 | 4,787,582 36 |
| " 1863 | 10,513,765 87 | " 1863 | 5,557,194 79 |
| Decrease | 581,165 46 | Decrease | 769,612 43 |

Among the leading articles imported are cotton manufactures, woollen do., drapery goods, and silk manufactures.

The necessaries, and many of the comforts, of life are enjoyed by the great majority of the inhabs. of Porto-Rico. The Xivaro, a name applied to all the whites below the better classes, swing themselves to and fro in their hammocks all day long, smoking their cigars, and scraping a guitar. A few coffee plants and plantain trees, a cow and a horse, an acre of land, in corn or sweet potatoes, constitute the property of what would be denominated a comfortable Xivaro; who, mounted on his meagre and hard-worked horse, with his long sword protruding from his basket, dressed in a broad-brimmed straw hat, cotton jacket, clean shirt, and check pantaloons, sallies forth from his cabin to mass, to a cock-fight, or to a dance, thinking himself the most independent and happy being in existence. The houses of all classes, in the country, are usually built of wood. The windows have no glass; they are shut with sliding boards; so that when it rains, or when the wind blows with violence, the family remains in darkness. The roofs of the better class of houses are covered with wooden shingles. There are scarcely any inns for travellers either in the towns or country.

The government, laws, and institutions are nearly similar to those established by Spain in the rest of her Transatlantic colonies. Porto-Rico is governed by a captain-general, whose authority is supreme in military affairs, and who is president of the royal *audiencia* for civil matters. The latter court is composed of the captain-general, a regent, three judges, a fiscal, two reporters, and a marshal; and is superior to all other constituted authorities, including the ecclesiastical tribunal. The captain-general has a *junta*, or council of the principal military officers. In the seven towns and villages, which are the caps. of departments, justice is administered by the mayors: in the smaller towns and villages by inferior magistrates, called lieutenants, who determine debts under 100 dollars, act as justices of the peace, collect the duty of subsidy, receiving 6 per cent. on the collections. They are appointed by the captain-general, who also appoints the clergy to their different livings, on the recommendation of the bishop. Public instruction is very backward; but schools, though few, are increasing. The island is divided into seven military depts., each under the command of a Spanish colonel. The regular military force comprises about 10,000, and the militia about 46,000 men. The naval force consists of a man-of-war, a schooner, and about a dozen gun-boats. The tithes and al-

cala duties were abolished in 1815, and the subsidy, or direct contribution on landed property, established instead. The total revenue of the colony was set down, in the Spanish budget of 1862-63, at 2,000,000 reales. The chief towns of the island are San Juan de Porto-Rico, the cap., Mayaguez, Ponce, Aguadilla, and Fagardo.

Porto-Rico, when discovered by Columbus, in 1493, is supposed, though probably on no very good grounds, to have had 600,000 inhabs., who were, in no very long time, almost exterminated. In the latter part of the 17th century it was taken by the English; but, from the prevalence of dysentery, they were soon after obliged to abandon it; since which time it has been mostly in the quiet possession of Spain. A revolutionary movement, which broke out in 1820, was put an end to in 1823.

PORTO-RICO (SAN JUAN DE), the principal city and sea-port of the above island, of which it is the cap., on rising ground, at the extremity of a peninsula, joined to the land by a narrow isthmus; lat. 18° 29' 10" N., long. 66° 7' 2" W. Pop. 21,190 in 1860. The town, which lies along the E. side of the harbour, is strongly fortified. The streets cross each other at right angles: being on a declivity it is well drained, and may be considered as one of the best and healthiest towns in the W. Indies. In the earlier part of the present century, most of the houses were of wood; but at present, except in the suburbs, not a wooden house is to be seen, and they are principally two stories high. There are some good public buildings, including the bishop's palace, and seminary; the royal military hospital, with 350 beds; public gaol, house of correction, a handsome theatre, town-house, with a magnificent public hall, and several convents. The government house, though old and sombre-looking, has some fine apartments. The cathedral is a large, unfinished, heavy fabric; there are several other churches, with a custom-house and arsenal. The harbour has a striking resemblance to that of the Havannah, to which it is but little inferior. Its entrance, about 300 fathoms in width, has the Morro Castle, at the NW. corner of the city, on its E. side, and is defended on the W., or opposite side, by forts erected on two small islands. Within it expands into a capacious basin, the depth of water varying from 5 to 6 and 7 fathoms. On its W. side, opposite to the city, there are extensive sandbanks; but the entrance to the harbour, and the harbour itself, is unobstructed by any bar or shallow. Porto-Rico is the residence of the governor, and the seat of the superior courts for the island. It has a society for the promotion of the fine arts, with numerous public schools and hospitals. It engrosses a large portion of the commerce of the island, and has, in consequence, attained to considerable distinction among the emporiums of the W. Indies.

PORTSMOUTH, including its suburb of Portsea, a parl. bor. and sea-port town of England, the principal naval arsenal of Great Britain, and the chief station of the fleet, co. Hants, on the W. side of Portsea Island, at the entrance to Portsmouth Harbour, opposite Gosport, and on the N. side of the Channel, separating the Isle of Wight from the mainland. 16 m. SE. Southampton, and 65 m. SW. London, on the London and South Western railway. Pop. of bor. 94,799 in 1861.

Portsea Island, which has Portsmouth at its SW. extremity, is about 4 m. in length (N. and S.), and from 2 to 3 m. in breadth, between Portsmouth Harbour on the one side, and Langstone Harbour on the other: it is connected with the mainland, at its N. extremity, by a stone bridge, and is generally fertile and well cultivated, producing excellent crops of corn, and large quantities of par-

icularly fine garden vegetables. Its coasts are well defended, at numerous points, by strong military works, including, together with the fortifications of Portsmouth itself, Fort Cumberland, Southsea Castle, and a long line of intrenched works at Hilsea. The external appearance of Portsmouth and Portsea is greatly embellished by the fine trees which ornament their ramparts; and few towns exhibit so imposing an approach as Portsea at its principal entrance from London. The entrances to Portsmouth, the older and more southerly part of the parl. bor., are much less striking; but its interior is far superior to that of its neighbour. Portsmouth may be generally described as consisting of three or four parallel streets, crossed at right angles by two or three other lines of thoroughfares. High Street, the principal, with its angular continuation, Broad, or Point Street, runs entirely through the centre of the town; it is wide and handsome, having on either side many large and excellent houses, several public buildings, and some very superior hotels. It has also been much improved by the removal, in 1836, of the old town hall, an unsightly brick building, which previously stood about its middle, blocking up the greater part of the coach-road. Many good private houses are to be met with in the other streets, and on the Grand Parade, a spacious open area, used for garrison inspections, and for the daily muster of the several guards; but in general the private buildings are of an inferior character, and the back streets, particularly those at the Point and toward the N. part of the town, are of the lowest character. The *Point* is a small peninsula stretching W. to form the mouth of the harbour, and mostly beyond the walls of the town. It is, with the opposite part of Portsea, the principal seat of naval traffic, most of the ship agents and brokers having their offices here, and, in time of war especially, it presents a scene of the greatest activity.

Portsea, which has entirely grown up since the beginning of last century, on a tract formerly called Portsmouth Common, N. of Portsmouth, now greatly surpasses the latter in extent and pop. It is divided into two nearly equal parts by its main thoroughfare, Queen Street, which runs for about $\frac{1}{2}$ m. in a direct line from Lion Gate, and is lined on each side with shops, many of which emulate those of the Strand or Fleet Street. Some few of the other streets, as St. James's Street, King Street, and the Common Road, are tolerably broad and well built; but, except these, none of the others approach even to mediocrity. The houses in Portsea are rarely more than two stories in height, and their fronts are but seldom stuccoed. It has but one handsome open space, and few public buildings. Both towns are well paved, well supplied with water, and well lighted with gas.

The suburbs beyond the walls comprise at least half the parl. bor., their more densely peopled portion extending over a space fully as large, if not larger, than that occupied by the two towns. Of these suburbs, Southsea alone has any pretensions to beauty. It consists of a succession of well built terraces facing the sea, and the E. ramparts of Portsmouth, being inhabited principally by naval, military, and government civil officers, and visitors resorting thither during the summer season. Behind these terraces are a number of tolerable streets, and some new squares. Elm Grove and Somerstown are sections of this suburb; the former, a little further eastward, consists of a series of elegant detached villas, surrounded by fine plantations and gardens, commanding prospects of Spithead and the Isle of Wight, and inhabited by opulent individuals. Landport and Flathouse, imme-

diately to the E. and N. of Portsea, have nothing, in point of appearance to recommend them; their inhabs. are, in a great measure, retail tradesmen and workmen employed by government. Newtown (Mile End), Kingston, and Buckland, E. of the foregoing, are cheerful and agreeable suburbs, principally extending along the London Road, and inhabited by the same classes as those residing in Southsea. Immediately without the walls of Portsmouth, stretching along the shore, is Southsea Common, a fine large open space, used for reviews and military inspections, and a favourite place for public recreation.

The importance of Portsmouth, like that of Plymouth, depends wholly on the excellence of her harbour, and on her convenient situation as a place for the outfit and rendezvous of the fleets in the Channel, or of those cruising off the coasts of France and Spain. It is this that has made her be selected as the principal station of the navy, and has consequently advanced her to the highest destination as a naval depôt. The harbour, which is unequalled in Great Britain, and surpassed but by few in the world, has a narrow entrance, not exceeding 220 yards in width, between Portsmouth and Gosport; but within its width increases, and it expands into a noble basin capable of containing the larger part of the navy of Great Britain. There is a bar outside the entrance to the harbour; but as it has about 18 ft. water over it, even at the lowest spring ebbs, it can hardly be said to be any obstruction to the navigation; and within the harbour there is water sufficient to float the largest men-of-war at any time of the tide. The anchoring ground is excellent; and, being free from sunken rocks, or other obstructions, ships lie as securely in it as if they were in dock.

The dockyard, which comprises about 120 acres, lies along the E. side of the harbour. It comprises all the establishments necessary for the construction and repair of ships of war, and for their outfit with the greatest despatch, including numerous building and graving docks, partly opening into the harbour, and partly into a large basin, which communicates with the latter. Along the quay, fronting the harbour, extends a noble line of warehouses, having in its centre a handsome octagonal observatory. In the rope-house, nearly 1,200 ft. in length, cables are twisted to the extent of 30 inches in circumference; and the anchor forge produces anchors of the largest size. The iron and copper mills, the copper foundry, where the copper is rolled into sheets for sheathing by steam-power, the rigging and mast-houses, timber berths, saw-pits, seasoning sheds and mast-ponds, are all on the most extensive scale. Probably, however, the most interesting machinery is that invented, or, at all events, vastly improved, by Sir Isambert Brunel, for cutting blocks. It is exceedingly ingenious, and has been productive of a vast saving of labour. During the late war upwards of 4,000 working-men were employed in Portsmouth dockyard, of whom 1,500 were shipwrights and caulkers; but in time of peace the numbers are greatly reduced.

In the dockyard are the navy pay office, the residences of the port-admiral, the admiral-superintendent, and the heads of the principal departments of the estab. The port-admiral's residence, formerly that of the commissioner (whose duties are now performed by the superintendent), is an elegant edifice of white brick, surrounded by gardens. Near it is the Royal Naval College, a spacious dark brick edifice, erected in 1729, its centre surmounted by a cupola and observatory well furnished with instruments. Here youths intended for the navy were formerly instructed in naviga-

tion; but, in 1839, the college was remodelled, and is now appropriated to the instruction of junior naval and marine officers in the higher branches of science connected with their profession, and especially the principles and practice of naval gunnery. The officers belonging to this establishment are boarded and lodged in the college, but are borne on the books as part of the complement of a ship of the line in the harbour. Immediately facing the residence of the port-admiral is a handsome white brick building, intended originally for a school or college of naval architecture, for the education of a 'superior class of shipwrights,' a plan which, though on no very satisfactory grounds, has since been abandoned. On the green, in front of the last mentioned building, is a bronzed leaden statue of William III. Adjacent to the college is a chapel-of-ease for persons attached to the dockyard. The latter was, during last century, the scene of several conflagrations. One of these, in 1776, was clearly the work of an incendiary, who was convicted and executed for the offence. The dockyard is, however, daily open to the inspection of visitors who apply for admission at the gate.

To the S. of the dockyard, and nearer the mouth of the harbour, is the 'gun-wharf,' or arsenal for ordnance stores. This is an extensive and very complete establishment. As a depot for cannon it is inferior to the arsenal at Woolwich, but, in most other respects, it is very superior to the latter. It comprises many extensive and handsome storehouses, filled with all kinds of ammunition; a neat armoury roofed with copper, and containing small arms for 20,000 men; a laboratory, and various other offices, spacious quays along the harbour, and a terrace of excellent residences for its officers, fronted by a finely planted inclosure. This establishment is separated into the two divisions of the old and new gun-wharf by the mill-pond; a dammed-up creek between Portsmouth and Portsea, which supplies the moats of both, and also turns a considerable flour mill formerly attached to the victualling office, but now in private hands. The victualling department, which formerly occupied some large piles of building within the town of Portsmouth, was, in 1828, removed to Weovil (see Gosport); and its former storehouses have partly been purchased by merchants of the town, and partly given place to a handsome row of modern dwellings, the new almshouses, and the building of the Philosophical Society. The custom-house is an insignificant building, but in a convenient situation. The functions of governor are exercised by a lieutenant-governor, who occupies a noble mansion in High Street, formerly the residence of the port-admiral.

Portsmouth appears to have been originally fortified by Edward IV. Its works were greatly augmented and improved during the reigns immediately succeeding, and in those of Elizabeth, Charles II. and James II. Under William III. they were completed, nearly as at present, the town being almost wholly enclosed within a bastioned *enceinte*, the ramparts faced with masonry, and encircled with broad moats, with a glacis beyond. But, owing to the rise of Portsea, the N. side of these works soon became useless; and, in 1770, the government began also to surround Portsea with works on a still more extensive scale. At present a continuous line of ramparts extends round both towns, and the belt of fortification is completed by the works surrounding Gosport, on the opposite side of the harbour. The ramparts, being planted with elms and poplars, form the favourite promenades of the inhab.; and facing the sea is the Platform, a fine stone battery, mounting 25 pieces

of cannon, and commanding an extensive and beautiful view. Portsmouth is entered by four, and Portsea by two, carriage gateways, some having considerable architectural beauty. Besides the town batteries, Spithead and the approaches to the harbour are defended by Southsea Castle, and Forts Cumberland, Blockhouse, and Monkton. Southsea Castle, founded by Henry VIII., about 1 m. SE. Portsmouth, is built almost wholly of stone; as are Forts Monkton and Blockhouse on the mainland. Fort Cumberland, on the E. extremity of Portsea Island, a structure of the last century, covers a large space, and has earthen ramparts faced with brick, and barrack-room for 3,000 men. The town, its suburbs, and auxiliary fortresses are garrisoned by the Portsmouth divisions of royal marines and marine artillery, and a certain number of infantry of the line. Within the town are several capacious and excellent barracks, and there are others in the gun-wharf, at Tipner and Hilsea. Portsmouth has a military hospital, and a marine infirmary situated between the custom-house and the gun-wharf. But Haslar Hospital for the reception of sick and wounded seamen, the principal establishment of its kind in the kingdom, is on the opposite side of the harbour at Gosport (which see). The chief engineering department for the S. and W. of England, and the residences of the commandants of the marines and engineers, are among the other principal government buildings.

The par. church of Portsmouth, founded about 1220, but principally rebuilt in 1693, is a spacious stone edifice with a square tower, 120 ft. in height, surmounted by a cupola and vane, which forms an important landmark. Among other monuments, it has one to Villiers, duke of Buckingham, assassinated here in 1628. The vicarage is in the patronage of Winchester College. Adjoining the grand parade is the garrison chapel and burying-ground. In Portsea are two chapels of ease, St. John's and St. George's. St. Paul's, Southsea, and All Saints', Newtown, are elegant Gothic edifices of similar architecture, the former built in 1822, at an expense of 15,229*l.*, and the latter, in 1827, at a cost of 12,464*l.* Portsea par. church is an antiquated edifice at Kingston, about 1½ m. from the town, and surrounded by a very extensive cemetery. The living is a vicarage, in the patronage of St. Mary's College, Winchester. There are numerous places of worship for Independents, Baptists, Wesleyans, Bryanites, Scotch Presbyterians, Unitarians, Rom. Caths., General Baptists, and Jews. The town-hall and gaol together occupy a large edifice; the latter, which is clean, convenient, and well conducted, is under the jurisdiction of the borough magistrates. A market-house and exchange, the general dispensary, savings' bank, workhouses, female penitentiary, beneficial society's hall, literary and philosophical institution, with a handsome edifice, and a good museum and library; Hampshire library with 5,000 volumes, the King's Rooms at Southsea, with an excellent bathing establishment, Green Row and York Rooms, used for balls, and a theatre, are the other principal buildings of public interest. There are Lancastrian and national schools, an endowed free grammar school for 50 boys; and St. Paul's school, a joint-stock subscription academy for superior classical and mathematical instruction; besides several good private academies, a mechanics' institute, forensic and philharmonic societies, and various charities. On the London road, about 1½ m. from the town, is a new and spacious public cemetery.

In addition to its other conveniences, Portsmouth harbour enjoys an important advantage

of opening into the celebrated road of Spithead, between the Hampshire coast and the Isle of Wight. It derives its name from a sand-bank called the Spit, extending about 3 m. in a SE. direction, from the narrow neck or tongue of land on which Gosport is built. A ship of war was formerly kept moored, as a guard or receiving ship, at the head of this bank; but since the peace this practice has been discontinued, and the roadstead is merely marked by buoys placed at regular intervals. It is here that ships fitted out in the docks and harbour rendezvous before going to sea, and it is also a secure and convenient asylum for the Channel fleet and other vessels, during the occurrence of storms. From its safety and capaciousness this roadstead is called by sailors, 'the king's bed-chamber.'

Inasmuch as Portsmouth depends for support on its being a great naval port and arsenal, its prosperity is necessarily greatest during war. At present, however, if we compare it with previous periods of peace, it may be said to be flourishing. It necessarily has a considerable trade in the importation of the various articles required in its numerous establishments, and for the supply of the inhabs., and the victualling of the fleet. In January, 1864, there belonged to the port, 153 sailing vessels under 50, and 99 above 50 tons, besides 9 steamers, of an aggregate burthen of 358 tons. The gross customs' revenue amounted to 22,478*l.* in 1863.

Portsmouth is connected with Arundel and London by a navigable canal, and communicates with Gosport by a floating bridge for passengers and carriages, the property of a company incorporated in 1838. Steamers ply to Ryde, Cowes, Lymington, Havre, Plymouth, Dublin, and other ports.

Portsmouth received its first charter from Richard I., which was confirmed by various subsequent monarchs. Under the Municipal Reform Act it is divided into seven wards; its municipal officers being a mayor, 13 aldermen, and 42 councillors. It has a commission of the peace under a recorder, and the boundaries of the municipal and parl. bor. are co-extensive. Petty-sessions are held three times a week, and a county court is established here, before which 2,181 plaintiffs were entered in 1848. Portsmouth has sent 2 mems. to the H. of C. since the 23d Edward I.; the right of election down to the Reform Act being vested in the mayor and corporation, the number of which seldom exceeded 60. The electoral limits were enlarged by the Boundary Act, so as to include all the parish of Portsea with the old borough; and, in 1865, there were 4,583 registered electors. Portsmouth is one of the polling places at elections for the S. division of Hampshire. Markets on Tuesdays, Thursdays, and Saturdays. The charter of Richard I. established a fair in the town, called the 'Free Mart,' which lasts for 15 days from July 10, and is succeeded by a 3 days' fair on Portsdown Hill, attended by a great concourse of people.

The earliest mention of Portsmouth occurs in the Saxon chronicle, which states that it existed in 501. It probably owes its origin to the sea having retired from Porchester, probably the anc. *Portus Adurni* at the upper end of the harbour, on which account the inhabs. removed thither, and built a town at the mouth of the port. It was taken and burnt by the French in 1377, but was soon recovered, and in the reign of Henry VIII. had become the principal naval arsenal of England.

PORTSMOUTH, a town and port of entry in the U. States, being the largest town, though not the cap., of New Hampshire, on a peninsula in

the Piscataqua, 3 m. from the Atlantic, 40 m. ESE. Concord, and 50 m. NNE. Boston. Pop. 12,109 in 1860. The town is well built, and having suffered severely at different times from fire, is now mostly constructed of brick. It has many handsome houses, and there are several good public buildings, including a fine episcopal church, various other churches, a court-house, gaol, almshouse, academy, and athenæum. Its harbour is one of the best in America; it is completely land-locked, and is accessible to vessels of the largest size, having 40 ft. water in the channel at low tide. It is defended by several forts, and on Great Island at the W. entrance is a light-house, with a fixed light 90 ft. above the sea. Two bridges cross the Piscataqua at Portsmouth, one of which is one-third of a mile in length. On Navy Island, opposite the town, is a navy-yard, belonging to the United States, with three wet-docks, and other establishments fit for the construction of large ships of war. Portsmouth has a considerable trade, it being the only seaport of New Hampshire.

PORTUGAL (KINGDOM OF), anc. *Lusitania*, the most W. state of continental Europe, occupying the greater part of the W. portion of the Spanish peninsula, between the 37th and 42nd degs. N. lat., and the 6th and 10th W. long., having E. and N. Spain, and S. and W. the Atlantic. Length, N. to S., about 350 m.; average breadth, rather more than 100 m. The kingdom is divided into seven provinces, the area of which and population, according to the census of 1838, and of 1858, is given in the subjoined table:—

| Provinces | Area, Sq. Miles | Population in 1838 | Population in 1858 |
|----------------------|-----------------|--------------------|--------------------|
| Minho . . . | 2,671 | 872,400 | 860,479 |
| Tras-os-Montes . . . | 4,065 | 331,200 | 324,295 |
| Beira, Upper | 8,586 | 996,350 | 1,025,371 |
| Beira, Lower | | 109,200 | 161,222 |
| Estremadura . . . | 8,834 | 790,700 | 755,122 |
| Alemtejo . . . | 10,255 | 314,810 | 305,404 |
| Algarve . . . | 2,089 | 135,260 | 152,784 |
| Total . . . | 36,510 | 3,543,420 | 3,584,677 |

Geographically considered, Portugal can be regarded in no other light than as a dependency on, or portion of Spain; and, in fact, all the mountain chains and great rivers by which she is traversed originate in the eastern and more extensive portion of the peninsula. The principal mountain chain, the Sierra de Estrella, runs SW. and NE. from the Spanish frontier, near Almeida, to Cape Roca, near Lisbon, the most westerly land in Europe, lat. 38° 46' 30" N., long. 9° 30' 24" W. The culminating point of this chain, near Covilha, is 7,524 feet above the sea. Another chain, the Sierra Mouchique, runs across the prov. of Algarve, the most southerly in the kingdom, terminating in Cape St. Vincent. There are a great number of inferior chains, and the provinces to the N. of the Douro are especially encumbered with mountains.

The great rivers, the Tagus, Douro, Minho, and Gaudiana, have their sources in Spain, though they are joined by some considerable affluents in their passage through Portugal. There are but few lakes, and those of no importance; but mineral and hot springs are not uncommon. Water, in many districts, particularly in the S., is both scarce and bad; and, in consequence, extensive tracts in the great plain of Alemtejo and other provinces are nearly uninhabitable. The climate is, in general, milder and more agreeable than in Spain, owing to the height of the mountains and the great extent of coast. In the rugged tracts

of the NE. (Tras os Montes) the air is in many parts keen. In the valleys, and in the S. part of the kingdom, the case is generally very different; but all along the coast the heat is tempered by the sea breezes. Snow seldom lies on the low ground; but the rains of winter are often heavy and long continued; and at this season the vicinity of Lisbon and other parts of the country are very subject to earthquakes. Violent hurricanes are also of frequent occurrence.

The general aspect of Portugal is similar to that of Spain, and even more luxuriant.

— 'It is a goodly sight to see
What heaven hath done for this delicious land!
What fruits of fragrance blish on every tree!
What goodly prospects o'er the hills expand!
Childe Harold, canto i. st. xv.

The *vegetable products* are very various, as well from difference of latitude as from the great variety of elevation. Wheat, barley, oats, flax, hemp, and other products of a northern latitude, are raised in the high grounds, vines and maize in those of warmer temperature, and rice in the low grounds. The chief fruits are olives, oranges, and lemons; but the last two grow only in the warm and sheltered valleys of the S. and central parts of the kingdom. The woods are extensive: in the N. they consist principally of oak; in the central provinces of chestnut, and in the S. of sea pine, kermes, and cork trees. Algarve produces the American aloe, date, and other intertropical products; and Portugal is supposed to have a greater number of indigenous plants than any other part of Europe. (Balbi, *Essai Statistique*, i. 145.) Silk is produced of very good quality; and, in general, any deficiency, whether in vegetable or animal products, is to be imputed not to the soil or climate, but to the indolence and unskilfulness of the people.

The *agriculture* of Portugal, though recently it has begun to improve, is still, speaking generally, in the most backward and degraded state imaginable. A variety of circumstances have conspired to bring about this result; among which, the heat of the climate and the want of water, especially in the southern provinces, have, no doubt, a very considerable influence. Probably, however, the mildness of the climate has been still more injurious than its aridity, for this has at once encouraged the indolence, and lessened the wants of the people. And if to these powerful physical causes we add the pernicious practice of exempting the clergy and nobility from those direct taxes which were made to fall with their full weight on the cultivators; the vast amount of property in mortmain, and prevented from coming into the hands of those who would turn it to the best account; the want of a proper method of letting, and the consequent insecurity of the occupiers; the want of a manufacturing pop., and of great towns, that is, of markets for agricultural produce; the extreme badness of the roads, and the difficulties in the way of internal communication; the number of saints' days, fasts, and other superstitious observances; and the ignorance of the people; we shall certainly have little cause to wonder at the low state of agriculture in most parts of the country.

In the greater portion of the kingdom the farmers are quite unacquainted with the rotation of crops, and, one would be almost disposed to conclude, of the differences of soil, inasmuch as they continue to raise the same crops indiscriminately from all sorts of land. Their implements are of the clumsiest and rudest description; the harrow and the hoe were, till lately, nearly unknown, and thrashing was usually performed by

trampling the grain under the feet of horses and cattle. Though, in so dry a country, the command of water and the irrigation of the lands be indispensable, this, in many extensive districts, is quite neglected. In consequence, the country is in parts but little occupied, and the traveller sometimes proceeds a distance of 15 or 20 m. without discovering as many houses. To show the deficiency of the means of communication, it may be sufficient to state that, on travelling from Abrantes to the Spanish frontier, along the N. side of the Tagus, a distance of about 100 m., there are six rivers to cross without a single bridge, though they are fordable only in dry weather.

It must not, however, be supposed that these statements apply equally to the whole country. The inhabs. of the greater part of the provs. of Entre-Douro-e-Minho and Tras-os-Montes, to the N. of the Douro, and of the adjoining portions of Beira, participate, to a considerable extent, in the industrious qualities of their neighbours the Galicians. (See GALICIA.) An abundant supply of water is here provided, partly from natural streams, but principally from wells dug in the sides of the mountains; and, in consequence, good corn crops are raised in the lower grounds, while the hills are covered with vineyards, and olives and other fruits are also extensively raised.

But, with these exceptions, agriculture in Portugal is, at this moment, probably in a more backward state even than in Spain, or any other European country. We incline, however, to think that this will not long be the case. The more intelligent classes have at length become aware of the vicious nature of the institutions which have so long prevented the development of industry; and, of late years, most important changes have been effected in the tenures under which landed property is held, and in its distribution. The feudal rights of the nobility and other landed proprietors have been suppressed; an equal system of direct taxation has been introduced; and a large extent of crown property and of estates belonging to monasteries, sold at low prices, has mostly found its way into the hands of industrious proprietors. Hence, though the want of capital, the ignorance and indolence of the peasantry, be most formidable obstacles to the rapid spread of improvement, it has notwithstanding already made a considerable progress. In proof of this we may mention that, despite the facilities afforded for the importation of corn and other bulky products from the interior into Lisbon, by means of the Tagus, which runs through the centre of the kingdom, that city was long indebted to foreign countries for a considerable portion of her supplies of corn; but this, we are glad to say, is no longer the case; and, in 1839, for the first time for centuries, considerable quantities of Portuguese corn were shipped from the Tagus! Flax, hemp, and potatoes are grown only to a small extent; and, owing to the want of due care and attention, the olive oil is of an inferior quality.

Wine, however, is the staple produce of Portugal, and that by which she is best known in the United Kingdom. The red wine, called port, from its being all shipped from Oporto, is produced in the Upper Douro, about 50 m. above Oporto, on a succession of low hills on both sides the river, having the finest soil and exposure. The produce of this district is generally divided into two sorts of wine, the *vinho do Fieitoria*, or Factory-wine, for exportation; and the *vinho do ramo*, an inferior wine for home consumption and distillation. Great complaints having been made,

about the middle of last century, by the merchants in England and their agents in Oporto, of the bad quality and adulteration of the wine, the matter came under the notice of the Portuguese government; and the method which it took to redress the evil is singularly illustrative of its sagacity and principles of action. Instead of leaving the matter to be adjusted between the growers of the wine and the merchants, or, at farthest, contenting itself with confiscating such wines as were found to be adulterated, it made over the whole district to a joint-stock company, and invested them with almost despotic privileges. Thus the agents of the company were authorised to class the wines belonging to individuals, and to fix their maximum price; so that the company became, in fact, the sole buyer, at its own price, of the wines produced within the limits of its charter. But for the rooted taste for the wines of the Upper Douro established in Great Britain through the influence of the long-continued high discriminating duty on French wines, it is probable that the institution of the company would have destroyed the Portuguese wine trade. It has however, owing to the continued demand for the British markets, continued to keep its ground, or rather to increase, though not nearly to the extent that, under other circumstances, might have been anticipated. It is a curious fact, that the Oporto wine company, after being suppressed by Don Pedro as a nuisance, has been re-established, though with less oppressive privileges. In addition to port, considerable quantities of Lisbon, Calcevella, and other white wines, are exported. Some red wine is also exported from Figueiras.

The pastures in Minho, and in the Sierra Estrella and some other parts, are excellent; but throughout most part of the kingdom they are very much neglected. In consequence of the great number of fast days enjoined by the church, few cattle were reared; and a large proportion of those required for the consumption of the principal towns were imported from Galicia and other adjacent Spanish provs. Horses are scarce, oxen being commonly used for draught, except in towns. Mules, however, are numerous, and of an excellent breed; and, with asses, are generally preferred, on account of the rugged nature of the country, to horses for travelling. Sheep breeding is principally conducted in Beira, whence large flocks are sent to winter in Alemtejo. The wool of the Portuguese sheep might, no doubt, with a little attention, be rendered equal to that of the Spanish sheep; but no pains have been taken to improve its quality. Goats and hogs are numerous; and the latter are of a superior kind, and yield excellent hams. The fisheries, which were formerly important, are now insignificant; except in Algarve, where tunny and pilchards are taken.

The mineral products are considerable, though few mines except those of iron have been wrought, in consequence partly of the scarcity of fuel, and partly of the supply of minerals (chiefly copper and lead) from Brazil. The mountains abound in fine marble, and contain traces of gold and silver. Large quantities of salt of a very superior quality are produced in bays along the coast by natural evaporation, especially at Setubal or St. Ubes, whence it is largely exported.

Gold dust is obtained by washings; and in antiquity the Tagus was famous for its golden sands: '*Tagus auriferis arenis celebratur.*' (Plin. Hist. Nat., lib. iv. cap. 22.) Coal is found near Oporto and elsewhere; and lead and antimony are raised, but not to any considerable amount.

Manufactures and Trades.—The manufactures of Portugal are in a very backward state: they

are in general carried on in separate cottages, like the coarse woollens of North Wales, or the linen of Normandy, and are founded on the primitive plan of every family manufacturing for its own consumption. Manufacturing establishments are but few in number, and are principally for the production of woollens, silk, and earthenware. Cotton has also been attempted of late years, and paper, glass, and gunpowder are made in a few places. The cottons, woollens, linens, hardware, and earthenware of England are all largely imported into Portugal, and are used by all but the very lowest classes. A very superficial knowledge even of some of the commonest arts exist. The carriages of all kinds, more particularly waggons and carts, agricultural implements, cutlery, locks, and keys, are ludicrously bad. The chief forte of the Portuguese appears to lie in ship-building and stone-masonry; they also excel in embroidery, and make good artificial flowers, and lace.

The navigation and commercial intercourse of Portugal are of more importance; and though, even in the times of Emanuel and Albuquerque, they were by no means so extensive as is generally supposed, they were, notwithstanding, very considerable, and appeared immense from the small amount of the shipping and trade of other nations. For a long time past the import and export trade of the country has been conducted chiefly by foreign merchants, particularly British, settled in Lisbon and Oporto. The exports consist almost entirely of raw produce, or of wine, oil, salt, wool, fruits, and cork. The imports include corn and flour, cotton goods (by far the most important article), hardware, woollens, fish, linens, earthenware, drugs, tea, and coal.

The commercial relations of Portugal are chiefly with Great Britain, and there is very little trade, either by land or sea, with other countries. Next to Great Britain, but far below, stand Brazil and France. The relative importance of British trade with Portugal will be seen by the following figures:—The imports for the year 1863, from all countries, amounted to 14,287,289,742 milreis; from Great Britain and British possessions they amounted to 7,220,990,500; and from Newfoundland to 274,283,822 milreis. The goods which entered Portugal for home consumption from Great Britain and British possessions amounted to considerably over one-half the entire importations from all other countries, while the exports to Great Britain and British possessions extended to nearly one-third of the entire export trade of the country. In the year 1863 the entire real value of produce imported into the United Kingdom from Portugal amounted to 2,333,809*l.*, which sum exceeded that of the preceding year's returns by 298,418*l.*; that of 1861, by 370,910*l.*; that of 1860, by 453,660*l.*; that of 1859, by 828,069*l.*; and that of 1858, by 1,254,034*l.* Wine, as already stated, is the chief article of Portuguese exports. The official returns relative to the wine trade of the Douro district show that in 1852 the number of pipes produced was 92,090, of which 35,833 were approved by the tasters as exportable; in 1862 the total quantity produced was 71,592 pipes, of which 54,291 were approved. The registered produce of the vintage of 1863 in the Douro district amounted to 82,866 pipes. There were exported from Oporto in 1860, 27,860 pipes, of which 22,416 were sent to Great Britain. In 1861 the exports were 26,908 pipes, of which 22,945 reached Great Britain; and in 1862 the exports reached 29,711 pipes, the number sent to Great Britain being 24,832. A large proportion of the residue was exported to British possessions.

Till the recent construction of a line of railway

from Lisbon to Oporto, and another line to Badajoz in Spain, there were scarcely any means of internal communication in Portugal. There is no navigable canal; and, till of late years, not a single road in Portugal was practicable for carriages for more than 20 or 30 m. from Lisbon. In fact, the only mode of travelling by land was in a litter, or on the back of a mule or horse; and in the wine country of the Douro, or in the province of Minho, two oxen sometimes took a whole day to convey a pipe of wine 5 or 6 m.; and to prevent the cart from being overturned, it was attended by 2 men.

Accounts are kept in reis and milreis; the milrea contains 1,000 reis, and is worth about 4s. 6d. The *dobran* or doubloon = 3l. 6s. 6d.; the *crusado* = about 2s. 6d. The lb. is 4,589 kilogr., or rather more than the lb. avoird.; the *arroba* = 32 lbs.; the *quintal* = 4 *arrobas*. The *mayo* for grain, &c. = 24 bushels; the *almudo* = 4½ gallons. The Portuguese foot is a little longer than the English.

Constitution.—Like the peninsular kingdoms of Castile and Aragon, Portugal had anciently her cortes or assemblies of the states. One of these assemblies, held at Lamego in 1141, conferred the title of king on Alfonso Henriquez, who had two years previously defeated the Moors in the great battle of Ourique. The cortes at the same time enacted a law for regulating the succession to the throne, in which, among other things, it is laid down that females shall not be eligible to the crown, though in the direct order of succession, if they have married a foreigner, and that their marrying a foreigner when on the throne shall be considered equivalent to an act of abdication. The powers of the cortes corresponded, in other respects, with those of similar assemblies in other countries; but their privileges and those of the sovereign were very ill defined; and the latter contrived, in the course of time, to engross all the powers of the state; the government of Portugal became, in all respects, as despotical as that of Spain; and the last convocation of the Cortes took place in 1697. (See *L'Art de Verifier les Dates*, part II. tom. vii. 1-40, 8vo. ed.)

From this period down to the administration of the Marquis de Pombal (1750-1776), every abuse continued to multiply, and Portugal was distinguished only by the imbecility of her government, the power and profligacy of the nobility and clergy, and the poverty and indolence of her people. The Marquis de Pombal suppressed the order of the Jesuits and confiscated their estates; he also suppressed some of the more oppressive privileges of the nobility and clergy, and effected various important reforms in several departments of the administration. In other respects, however, his policy evinced the narrowest and most illiberal views; and, on his dismissal from power, most part of the old abuses in the government revived, and the country continued in its former state of apathy and abasement.

The events connected with the great war in the peninsula, the emigration of the court to Brazil, the long continuance of the English armies in the country, the organisation of the Portuguese army on an improved footing, and the influence of the changes in Spain, laid the foundations of a new order of things. The nation was dissatisfied with the continued residence of the court in Brazil, which, in fact, made Portugal a dependency of the latter, and the wish for some fundamental changes in the frame of the government became general. At length, in August, 1820, a revolution broke out, and a free constitution was soon after established.

The present fundamental law of the kingdom is the 'Carta de Ley' granted by King Pedro IV., April 29, 1826, and altered by an additional act,

dated July 5, 1852. The crown is hereditary in the female as well as male line, but with preference of the male in case of equal birthright. The constitution recognises three powers in the state, the legislative, executive, and 'moderating' authority, the two last of which reside in the sovereign and his responsible ministers. There are two legislative chambers, the 'Camara dos Pares,' or House of Peers, and the 'Camara dos Deputados,' or House of Commons, which are conjunctively called the General Cortes. The peers, unlimited in number, but actually comprising 115, are named for life by the sovereign, by whom also the president and vice-president of the first chamber are nominated. The peerage was formerly hereditary in certain families; but on May 27, 1864, the cortes passed a law abolishing hereditary succession. The members of the second chamber are chosen in direct election by all citizens possessing a clear annual income of 133 milreis, or 22l. The deputies must have an income of at least 390 milreis, or 89l. per annum; but lawyers, professors, physicians, or the graduates of any of the learned professions, need no property qualification. Continental Portugal is divided into 37 electoral districts, returning 154 deputies, to which Madeira and the Azores add 25. Each deputy has a remuneration of about 10s. a day during the session. The annual session lasts three months, and fresh elections must take place at the end of every four years. In case of dissolution, a new parliament must be called together within thirty days. The general cortes meet and separate at specified periods, without the intervention of the sovereign, and the latter has no veto on a law passed twice by both houses. All laws relating to finance and general taxation must originate in the chamber of deputies.

Justice is administered in the first instance by the *Juizes de Fora*; and appeals are made to the *corregedores* of the *provas*, and from these to the *Casa de supplicação* at Lisbon, and the *Relação do porto* at Oporto. All these tribunals are, however, subordinate to the royal court in Lisbon. Great abuses are said to exist in almost every department, both in the judicial and administrative branches, the inadequacy of the salaries leading to the acceptance of bribes.

The religion of Portugal is the Roman Catholic, unalloyed with any taint of Protestantism, but contributing but little, if anything, to the morality of the people. The Inquisition no longer interferes with freedom of conscience, having been abolished in 1821. The Portuguese church is under the jurisdiction of a patriarch, with extensive powers; three archbishops, and fourteen bishops. Notwithstanding the hostility of the Marquis de Pombal to the monks, who used to say of them that they were *la vermine la plus dangereuse qui puisse ronger un état*, their numbers previously to the late revolutions were estimated at about 8,000, and the revenue of the conventual establishments was supposed to exceed 1,200,000l. a year. However, an end has been put to this state of things: the monks at present have to support themselves as they best may, on a small stipend that has been allowed them, and most of their property has been confiscated.

The language of Portugal is merely a dialect of the Spanish, differing but little more from the latter than Scotch from English. Education is, at once, little diffused and of bad quality. There is a university at Coimbra; besides which, seventeen high seminaries and numerous schools exist, affording instruction to about 33,000 pupils. With the exception of Camoens, few Portuguese authors are known beyond the limits of their country.

The army consists of about 28,000 men; 21,500 infantry, 3,700 cavalry, and 2,400 artillerymen. The forces of Portugal, whether naval or military, have in general been very inefficient. A partial stimulus was given, in 1760, to the Portuguese army by a German commander, the Count de Lippe; but after his death his plans were not followed up; and it was not till 1809 that Portuguese troops, recruited by British funds, and disciplined by British officers, became worthy the ancient renown of their country. The navy, in 1863, comprised 34 men-of-war, with an aggregate of 294 guns. Many of the ships, however, were reported to be not seaworthy.

The public revenue, in the financial year 1863-64, amounted to—in the budget—15,371,266 milreis, or 3,415,857*l.*, and the expenditure, in the same period, to 16,910,354 milreis, or 3,757,856*l.* The revenue has not much risen for the last thirty years. It was 11,940,151 milreis in 1834; two millions less, or 9,843,170 in 1844; and 10,793,407 milreis in 1854. In the financial year 1858-59 the public income amounted to 12,206,747 milreis, or 2,746,518*l.*; and in 1860-61 to 12,504,534 milreis, or 2,813,520*l.* The public debt amounted, at the end of 1862, to 30,635,000*l.*, of which the foreign debt constituted about one-half.

The Portuguese are but little indebted to the accounts given of them by travellers. But their character, as drawn by Du Chatelet (*Voyage en Portugal*, i. 69-71), though not very flattering, is held to be nearly correct. 'Il est, je pense, peu de peuple plus laid que celui de Portugal. Il est petit, basané, mal conformé. L'intérieur répond, en général, assez à cette repoussante enveloppe, surtout à Lisbonne, où les hommes paroissent réunir tous les vices de l'âme et du corps. Il y a, au reste, entre la capitale et le nord de ce royaume, une différence marquée sous ces deux rapports. Dans les provinces septentrionales, les hommes sont moins noirs et moins laids, plus francs, plus lians dans la société, bien plus braves, et plus laborieux; mais encore plus asservis, s'il est possible, aux préjugés. Cette différence existe également pour les femmes; elles sont beaucoup plus blanches que celles du sud. Les Portugais, considérés en général, sont vindicatifs, bas, vains, rivaux, présomptueux à l'excès, jaloux, et ignorans. Après avoir retracé les défauts que j'ai cru apercevoir en eux, je serois injuste si je me taisois sur leurs bonnes qualités. Ils sont attachés à leur patrie, amis généreux, fidèles, sobres, charitables. Ils seroient bons chrétiens, si le fanatisme ne les aveugloit pas. Ils sont si accoutumés aux pratiques de la religion, qu'ils sont plus superstitieux que dévots. Les hidalgos, ou les grands de Portugal, sont très-bornés dans leur éducation; orgueilleux et insolens; vivant dans la plus grande ignorance, ils ne sortent presque jamais de leur pays pour aller voir les autres peuples.'

The Spaniards and Portuguese regard each other with a deep-rooted national antipathy.

'Well doth the Spanish hind the difference know
'Twixt him and Lusian slave, the lowest of the low.'

'Strip a Spaniard of all his virtues, and you make a good Portuguese of him,' says the Spanish proverb. 'I have heard it more truly said,' says Dr. Southey (*Letters*, ii. 64), 'add hypocrisy to a Spaniard's vices, and you have the Portuguese character.' The two nations differ, perhaps purposely, in many of their habits. 'Almost every man in Spain smokes: the Portuguese never smoke, but most of them take snuff. None of the Spaniards will use a wheelbarrow; none of the Portuguese will carry a burden: the one says, "It is fit only for beasts to draw carriages;" the other, that

"It is fit only for beasts to carry burdens." In one respect, however, their tastes are identical, bull-fights being quite as popular among the Portuguese as among the Spaniards. The statements of another traveller, Semple, as to the Portuguese character, coincide with those of Du Chatelet. 'The Portuguese are generally dark-complexioned and thin, with black hair, irascible and revengeful in their tempers, and eager in their gestures on trivial occasions. They are also said to be indolent, deceitful, and cowardly; but they are temperate in diet, and that may be classed at the head of their virtues, if, indeed, they have many more. They have no public spirit, and, consequently, no national character. An Englishman, or a Frenchman, may be distinguished in foreign countries by an air and manners peculiar to his nation; but any meagre, swarthy man may pass for a Portuguese.' All classes seem to despise cleanliness; and Lisbon and the Portuguese towns generally are, certainly, entitled to the not very enviable distinction of being about the filthiest in Europe. The morals of both sexes are said to be lax in the extreme, and assassination is a common offence. But the fair presumption is, that, under the beneficial influence of modern progress, the abuses that have depressed and degraded the nation will be extirpated; and that the Portuguese will once more recover their ancient place among European nations.

History.—This country, anciently called *Lusitania*, was taken possession of by the Romans about anno 200 B.C., previously to which, some Phœnician and Carthaginian colonies are supposed to have been planted on its shores. It remained a Roman province till the fifth century, when it was invaded by the Suevi and Visigoths. The Moors landing in the S. of Spain in the early part of the eighth century, and meeting with little resistance from its thinly spread population, easily overran the greater part of Portugal; but the nature of the country favouring the operations of the inhabitants, they were not long in recovering possession of its more northern and mountainous portion. The name of *Lusitania* seems to have been exchanged about this period for that of *Portugale*, subsequently changed into Portugal, from the circumstance of Oporto, the principal stronghold of the Christians, being then called *Calle*, or *Porto Calle*. (*D'Anville, Etats Formés en Europe*, p. 192.)

In the 11th century Portugal became an earldom, under the kingdom of Leon and Castile; and during the 12th it was erected into an independent kingdom. Its power now rapidly increased; and by the acquisition of Algarve, in 1249, it arrived at its present limits. In the latter half of the 14th century the voyages and discoveries commenced which have shed immortal lustre on the Portuguese name. During the 15th century, Madeira, the Canaries, and Azores were discovered and colonised; and, in 1498, Vasco de Gama doubled the Cape of Good Hope, and opened a new route to India. In the following century the Portuguese explored the coasts of Newfoundland and America; took possession of Brazil; made important acquisitions in India and the Persian Gulf, and discovered the Moluccas; by which successful enterprises they monopolised the commerce of the East, and a great share of that of the West. But the prosperity of Portugal was short-lived. After the disastrous defeat and death of King Sebastian, in Africa, in 1578, Philip II. of Spain seized on the kingdom, which remained a Spanish prov. from 1580 to 1640; and when she regained her independence, the greater part of her commerce, and her foreign possessions,

were in the hands of the Dutch. But, notwithstanding the emancipation of Brazil, Portugal still preserves the Azores, Madeira, Cape de Verd, and Guinea Islands; the settlements of Angola and Mozambique, in Africa, and those of Goa, Dilli (Timor), and Macao, in Asia. In 1807, Portugal was invaded by the French, when the royal family removed to Brazil. John VI. dying in 1826, Dom Miguel usurped the throne in 1827, which he held till 1833; when, after a lengthened contest, Donna Maria II., founder of the still reigning house of Braganza-Coburg, was established in its possession.

POSEN, a prov. of the Prussian monarchy, comprising the portion of Poland assigned to Prussia by the treaty of Vienna in 1815, having N. the prov. of Prussia and Brandenburg, E. Poland, and S. and W. Silesia and Brandenburg. It is of a triangular shape. Area, 11,374 sq. m. Pop. 1,494,621 in 1861. Principal towns, Posen and Bromberg. It is divided into two regencies, and these again into 6 circles. Surface generally flat, and in part occupied by extensive marshes and forests. Principal rivers, Warta, Netze, and Obra. Soil various, but generally clay and black loam intermixed with sand, and naturally very fertile. Principal products, corn, timber, wool, and honey. Minerals and manufactures unimportant. A vast number of leeches are taken in this prov., especially in the circle of Bomster. This is the most backward of the Prussian provinces. When it first came into the possession of Prussia, in 1792, the great bulk of its inhabs. were in a state of predial slavery, and were as ignorant and brutalised as can well be imagined. The vigorous and enlightened government of Prussia at once put down the excesses of the nobles, and has exerted itself, by introducing an improved judicial system, establishing schools and otherwise, to improve the habits and condition of the people. These efforts, combined with the total abolition of servitude, have had the best effects; though a lengthened period will still have to elapse before the vices and habits engendered by centuries of slavery and degradation be completely eradicated, and the population become as intelligent and industrious as in the more advanced provinces.

POSEN, a city of Prussia, cap. prov. and reg. of the same name, at the confluence of the Prozna with the Warta, 147 m. E. by S. Berlin, on the railway from Breslau to Stettin. Pop. 51,232 in 1861, exclusive of a garrison of 7,353 men. Since the peace of 1815 its fortifications have been vastly improved, and it is now one of the bulwarks of the kingdom on the side of Russia. Though an old town, it is pretty well built. Principal edifices, cathedral and town-house. It is the residence of the provincial authorities, and of an archbishop; and has a court of appeal, a gymnasium or college, a theological seminary for the education of Catholics, and a school of arts. The business of watch-making is carried on to some extent; and there are manufactures of leather, linen, and fire-arms. It has three great annual fairs. Here, as in the rest of Poland, the buying and selling of goods is chiefly managed by Jews, who occupy a particular quarter of the town.

POTENZA (an. *Potentia*), a city of South Italy, cap. of prov. of its name, on a hill in a wild and rocky tract, near the source of the Basiento, 54 m. E. Salerno. Pop. 12,789 in 1862. The city is fortified, and has a cathedral, several other churches, and convents, a seminary, a royal college, lyceum, and hospital; but, speaking generally, it is poor and meanly built. It is a bishop's see, and the seat of the superior judicial courts for

the prov. It suffered greatly from earthquakes, especially in 1684 and 1812.

POTOSI (SAN LUIS DE), a city of Mexico, cap. of the state of same name, near the source of the river Tampico, 165 m. W. Tampico, and 75 m. NNE. Guanaxuato; lat. 22° N., long. 103° 1' W. Pop. of the city itself estimated at 15,000, but including the *barrios*, or suburbs, which cover a large extent of ground, it may amount to from 50,000 to 60,000. It presents a fine appearance: the churches are lofty, and some of them very handsome. The streets are well built, very clean, and intersect each other at right angles. The houses in the square, and in the principal avenues leading to it, are of stone, and two stories high; those in the suburbs are low, and of *adobes* (sun-dried bricks). The government house in the square has a front of cut stone, and is ornamented with Ionic pilasters. The market-place is well supplied with meat, fruits, and vegetables. From its situation the city is the natural depôt of the trade of Tampico with the N. and W. Mexican states. Its foreign trade is at present almost wholly in the hands of natives of Old Spain or of the U. States. The European imports consist principally of French brandies, wines, silks, and cloths, English hardware and printed cotton goods, with some mantas or ordinary cotton manufactures from the U. States. In addition to its foreign trade, San Luis supplies the neighbouring states of Leon and Cohahuila with home-made goods of various kinds. The people are better dressed, and there are fewer beggars here, than in almost any other part of Mexico.

The mines in the neighbourhood have long ceased to be wrought, from exhaustion of the ores; they were, however, formerly very productive. A college, founded by voluntary subscription, and in a flourishing state, affords gratuitous instruction to poor students in Latin, jurisprudence, theology, and constitutional rights. The city was founded in 1586.

Potosi, a city of Upper Peru or Bolivia, famous for its rich silver mines, on the N. declivity of the Cerro di Potosi, a mountain belonging to the Andes, lat. 19° 36' S., long. 67° 21, 45' W.; 64 m. SW. Chuquisaca. Early in the 17th century this city is said to have had 150,000 inhabs.; but it is now almost deserted. It is built on uneven ground, and has a spacious square in the centre. The government-house, the town-house, and the gaol, under the same roof, occupy one side; the treasury and government offices another; a convent, and an unfinished church the third; and private houses the fourth. Extensive suburbs, once tenanted by Indians and miners, are now without an inhab., and the vestiges of the streets are all that remain. Among the most remarkable public edifices is the mint, substantially built of stone, in 1751, at a cost of 1,148,000 dolls. In the principal square an obelisk 60 ft high was erected in honour of Bolivar, in 1825. The houses of Potosi, generally, are of stone or brick, and of only one story, with wooden balconies, but without chimneys. The country round is perfectly barren, and the climate disagreeable; the rays of the sun are scorching at noon, while at night the air is piercingly cold. The market is well supplied; though, from many articles having to be brought from a considerable distance, the necessities, as well as the luxuries of life, are very dear.

The Cerro di Potosi, which is 18 m. in circuit, and rises to the height of 16,037 ft., is supposed to be a solid mass either of the ores or the matrix of the precious metals, of which it has produced a vast quantity. Viewed from the city, it appears

died all over with numerous tints, green, orange, yellow, grey, and rose colour. The discovery of its wealth was made by an Indian, who, in hunting some goats, slipped, and, to save himself, took hold of a shrub, which, in coming away from the ground, laid bare the silver at its root. The mines were first wrought systematically in 1545, from which time, till 1803, they are said to have produced 1,095,500,000 piastres, or 237,358,334*l.* worth of silver on which duty was paid; and, during the same period, they also produced a large quantity of gold; at the same time that great quantities of both metals were smuggled, or put into circulation without payment of the duty. About 5,000 openings are said to have been made in the mountain; but the number of mines wrought during the present century has rarely exceeded 100. At one time, the mines yielded about 30,000 ducats a day; and for a lengthened period they produced about 9,000,000 dollars a year. But they had begun to decline long previously to the revolution; and since then they have been, whether from their exhaustion, defects in the mode of working, or the want of capital, nearly unproductive. The ore is pulverised in water-mills, worked with overshot wheels, at from 1 to 10 m. from the city; but, according to Helms, both the mining and reduction of the ore were conducted in the most bungling manner.

POTSDAM, a town of Prussia, prov. Brandenburg, cap. reg., at the confluence of the Rathe with the Havel, on an island formed by the two rivers, a canal and lakes, 17 m. SW. Berlin, on the railway from Berlin to Magdeburg. Pop. 41,824 in 1861, excl. of garrison of 6,953 men. Potsdam has been appropriately termed the Versailles of Prussia. It is a favourite royal residence; streets straight, broad, and well paved; and the houses, though frequently small, and not very commodious within, have, for the most part, splendid fronts. It is encompassed by walls and palisades; has numerous gates and bridges, some of which are highly ornamental; and is divided into three parts, the old and new towns, and Frederickstadt. The most remarkable edifices are, the palace, a magnificent structure on the Havel, having attached to it a theatre, a menagerie, and spacious stables; the church of the garrison, in which are deposited the remains of Frederick the Great; the church of St. Nicholas, and the great military orphan hospital. In the old market-place is an obelisk of red Silesian marble, 75 feet high, on a pedestal of white Italian marble; on the base are inscribed the names of the great elector and his successors. The barracks are very extensive. There is a lyceum, a military school, with various public schools of inferior note, and sundry literary establishments. There are also, exclusive of the military orphan hospital, mentioned above, an infirmary and workhouse. Potsdam was formerly more of a barrack than of a town; but for a good many years past it has been distinguished in various branches of manufacture, such as that of silk, hardware articles, and arms. Being situated on a navigable river, communicating by canals and railways with many large towns, and, with the Elbe and the Oder, it has a good deal of commerce.

Potsdam is a very old town, having existed in the 8th century: it did not, however, become a place of any importance till the elector Frederick William selected it for a residence, and began the palace. It was materially improved by king Frederick William I., but, like Berlin, it owes its principal embellishments to the taste and liberality of Frederick the Great. In its environs is *Sans Souci*, the favourite residence

of that illustrious prince, and the place where he expired, on the 17th of August, 1785. The new palace and the marble palace are also in its vicinity.

POUGHKEEPSIE, a town and river-port of the U. States, co. New York, on the Hudson, 70 m. N. New York. Pop. 15,200 in 1860. The river-bank here is 200 ft. in height, but the town has five convenient landing-places. It occupies about 1,800 acres, on which some 50 or 60 streets have been laid out, several of which are well paved. Many of the stores in the main street are equal to those of the Broadway in New York, and numerous private houses exhibit both wealth and taste. There are numerous churches, a court-house, a gaol, a co. workhouse, an academy, and a Lancastrian school. Poughkeepsie has a considerable trade, and communicates regularly, by steam boats, with New York, Newbury, and other towns. It was founded by some Dutch families, in 1735, and incorporated in 1801.

PRAGUE, a city of Bohemia, of which it is the cap., near the centre of the kingdom, on the Moldau, by which it is intersected, 73 m. SSE. Dresden, and 152 m. NE. Vienna, on the railway from Dresden to Vienna. Pop. 142,588 in 1857. The city stands in a basin, surrounded on all sides by rocks and eminences, upon the slopes of which the buildings rise tier after tier, as they recede from the water's edge; and few cities of Austria, or, indeed, of any country, have so grand and imposing an external appearance. It is divided into four quarters, of which two, the Altstadt and Neustadt, are on the right, and the others, the Kleinseite and Hradschin, on the left bank of the Moldau. The Altstadt, or most ancient part of the city, stretches along the margin of the river, and for a considerable distance up the ascending ground: it comprises the university and the archbishop's palace, the municipality, the principal churches and public edifices, the theatre, and all the superior shops. It is the district of commerce and general activity, and is crowded with a dense and active pop. Its streets are generally narrow, dark, and winding; the principal edifices massive and gloomy; and the private buildings, usually of stuccoed brick, are black with age and dirt, and so lofty as to exclude the light from the avenues between them; but, on the other hand, there is an air of antiquity, and a singularity of architecture about many of the edifices, public and private, that renders them at once venerable and interesting. The open places are often surrounded by low heavy arcades, beside which are the churches or public buildings, exhibiting a fantastic mixture of Gothic and Italian decorations; while at every turn the eye is met by some memorial of historical events. Beyond the Altstadt, surrounding it on three sides, and separated from it only by a large wide street termed the *Graben*, from its having been formerly the city ditch, is the Neustadt (new city), founded by the emperor Charles IV., the streets of which are much more open and spacious, and are generally rectangular. Here are the vast convents, hospitals, and other public buildings, which owed their magnificence to the Jesuits, but the houses are poor, and the inhabitants, chiefly mechanics, artisans, and traders of the lower class. At one extremity of the Neustadt, up the river, is the fortress and Arsenal of the Wissehrad, crested on a bluff rock, and connected with the line of works which extends in a curve behind the old and new city, embracing them both, and descending to the river at each extremity. On the opposite bank of the Moldau, the surface of the ground is for a small space comparatively even,

behind which arises a range of high, bold, craggy hills. On the even space, and partly up the ascent, is built the Kleinseite (small side): this is the quarter of the aristocracy; in it are the palaces of the ancient Bohemian nobles, with attached gardens and shrubberies, which often extend high up the irregular ascent behind.

The lofty ridge above the Hradschin forms a magnificent termination of the prospect, as viewed from the bridge below or from the opposite side of the river. Here, on the summit of a long bold eminence, is the vast palace of the old Bohemian monarchs, and close behind it rise the choir and tower of the cathedral. Further on, along the hill, are groups of stately edifices, and beyond these again may be seen, on a loftier point, the fine Premonstratensian monastery of Strahow, with its lofty towers and dark thick groves overhanging the river. The quarters of Prague on the left, like those on the right bank of the Moldau, are inclosed by fortifications, but these are of little strength, and were raised by Charles IV. merely to give employment to the working population, as the chance of invasion was then but inconsiderable.

The bridge which connects Altstadt with the Kleinseite, the only one hitherto constructed within the limits of the city, is one of the longest in Austria. It is a ponderous structure of stone, 1780 ft. in length and 85 in breadth, with a lofty tower at each extremity, and colossal stone statues, single and in groups, among which is pre-eminent that of St. John Nepomuck, the tutelary saint of the city. Not far from the bridge, and attached to the Altstadt, is the Judenstadt, a district allotted to the Jews, whose number is about 8,000, living, as usual, in crowded filthy abodes, forming a labyrinth of narrow winding streets.

The Hradschin, or palace on the hill, is a vast pile, more remarkable, however, for extent than beauty. It is said to be larger than the palace at Vienna, and to comprise 440 apartments, including the hall of Ladislaus, imperial audience-room, and hall of assembly for the states. On a narrow terrace immediately below the palace, two obelisks mark the spot where the imperial commissioners and their secretary, sent thither with the most intolerant edicts against the Bohemian Protestants, were indignantly thrown out of the windows of the green chamber, by the deputies of the kingdom, in 1618. Notwithstanding the great height of the windows whence they were ejected, the commissioners escaped unhurt, by falling, as is said, on a dung-hill. This event may be regarded as the commencement of the 80 years' contest, ended by the peace of Westphalia in 1648, which, while it secured the liberties of the rest of Germany, unfortunately consummated the slavery of Bohemia, which had long been foremost in freedom and toleration. The cathedral, begun in 1344 and finished in 1486, is within the precincts of the Hradschin. It is a fine specimen of Gothic architecture, and is surmounted by a lantern-crown similar to that on the tower of St. Giles, Edinburgh. The choir, built by Charles IV., and the unfinished chapels that surround it, are much admired. In the cathedral are the tombs of many Bohemian sovereigns and other distinguished individuals; a fine altar piece and other paintings; mosaics, and the costly shrine of St. John Nepomuck. Others of the numerous churches, as that of the *Theinkirche*, in which is the tomb of the famous astronomer, Tycho Brahe, who died here on the 13th October, 1601, are interesting for their monuments. Prague had formerly a great number of convents, but Joseph II. secularised most of these

establishments. Among the chapels is one which is an exact representation of that of Loretto.

The town-hall, arsenal, military hospital, military orphan asylum, lying-in hospital, principal workhouse, and theatre are amongst the finest of the public edifices. Of the private palaces, that built by the famous Wallenstein, duke of Friedland, is the most remarkable. Though unfinished, it is of immense extent, 100 houses having been pulled down to make room for its site. It still belongs to a collateral branch of Wallenstein's family: the apartments and furniture, which are said to remain in their original state, are shown to strangers, and the park attached to the palace is thrown open to the public; but the residences of the nobility in the Kleinseite are mostly deserted. They are generally large ugly buildings, some, however, with a good deal of architectural decoration; and the dirty rubbishy appearance of their brick walls, half covered with worn-out stucco, conveys the idea of prisons or poorhouses rather than of mansions of distinguished nobles. Their proprietors have transferred themselves and their wealth to the Austrian cap.; leaving to the Bohemians these sad memorials of times, when the court of Prague might have looked with scorn on the inferior splendour of Vienna. Yet in some of these desolate abodes, covered with dust and rubbish, there are immense collections of books. The Lobkowitz library is said to comprise more than 70,000 vols., the Kinsky 40,000, the Klebelsberg 18,000, the Klam Martinitz 21,000, and others equal or superior numbers. In some of these palaces a few rooms are fitted up and occupied during winter by a minor branch of the family, and in many of them are offices for the stewards and managers of the Bohemian estates; but when, on particular occasions, as, for instance, at the coronation of a sovereign, it is requisite for the proprietors to visit Prague, they usually occupy apartments in some hotel, their own palace being quite unfit for their reception. There are, however, a few exceptions to this general emigration. Here and there may be found the mansion of some great noble, who still upholds the local dignity of his ancestors; and below these highest magnates are a considerable body of resident nobles, inferior in wealth, though perhaps not in blood, who take a part in the provincial administration, and who form among themselves, in the winter season, an agreeable and elegant society. In the palace of Count Nostitz is a gallery rich in cabinet pictures of the Dutch and Flemish masters; and in that of Count Sternberg is the national museum, comprising extensive collections of paintings, books, fossils, and natural objects. The library, in the Strahow monastery, one of the finest apartments of its kind in Germany, comprises a collection of about 50,000 volumes.

The university of Prague, founded by Charles IV. in 1348, occupies a large edifice termed the *Carolinum*, and is remarkable as the first great public school established in Germany. The students were formerly divided into 4 nations, and are said, though there can hardly be a doubt that the statement is exaggerated, to have amounted, early in the 15th century, to 40,000. In consequence, however, of a measure proposed, in 1409, by Huss, who was then rector, to abridge the privileges of the foreign students, more than half the pupils attending the university withdrew to Leipsic, Heidelberg, Cracow, and other seminaries. The *Carolinum* is now exclusively devoted to instruction in medicine, law, and the sciences; while education in theology is conducted in the *Clementinum*, an immense building, founded by

Ferdinand III., in 1653, as a convent and seminary for Jesuits. The university library, in the latter, comprises about 150,000 vols. It has also an observatory, botanic garden, and various museums; and is attended by about 1,700 students. There are 3 gymnasia, preparatory to the university, with several other high schools, ecclesiastical, teachers', and Jewish schools, a polytechnic institute, conservatory of music, academy of the fine arts, and many orphan and deaf and dumb asylums, and other charities. The Jews settled here at a very early period, and have an infirmary and orphan asylum of their own, and as many as 9 synagogues, one of which is very ancient.

Prague has manufactures of printed cotton, linen, silk, and woollen stuffs, leather, hats, liqueurs, earthenware, and refined sugar, and is the centre, not merely of the commerce of Bohemia, but of an extensive and rapidly increasing transit trade. It owes this distinction to its situation on the Moldau, or principal arm of the Elbe, which is navigable by large boats to Budweis (80 m. direct distance S. from the city), where it is joined by a railway from Lintz, on the Danube. Prague is thus rendered the centre, as it were, of the communication between Hamburg on the one hand, and Vienna on the other; and is, besides, connected by railway with Dresden, Leipzig, and other German cities. Several annual fairs are held here, including a large wool fair in June.

'Owing,' says an English traveller, Mr. Spencer (Germany and the Germans, i. 207), 'to the number of its palaces, churches, public buildings, and other splendid remains of its ancient grandeur, Prague is more imposing than Vienna and far preferable as a residence; the situation being much more salubrious, and the climate more mild and equable, the cold in winter rarely exceeding 24° Reaum., and generally averaging between 7° and 10°; while, during the greatest heat of summer, the thermometer seldom rises above 28°. Dr. Stultz, a celebrated German physician, who has written upon the relative salubrity of German towns, considers Prague as one of the most healthy in the empire, and affirms that it is no uncommon occurrence for the inhabs. to attain the age of 100, and even sometimes 115. Provisions are good and cheap, and an excellent red wine resembling Burgundy is produced in the neighbourhood. The theatre equals that of Vienna, and the musical department and orchestra cannot be too highly praised. Public and private concerts are also very frequent; and, except Vienna, there is no town in Germany where music is cultivated with so much success. Indeed, this taste may in the Bohemians be termed truly national, for they excel both in vocal and instrumental music; and not a few of the natives travel to Italy, acquire the language, Italianize their names, and make large fortunes in Vienna. The harp appears to a stranger their native instrument; for we meet with itinerant harpists in every part of the country, whose strains generally accompany the mid-day repast at every inn, however small, whether in the capital or the provinces. Their language, which is rich and expressive, is also musical, and sounds as pleasing as the Italian when wedded to melody.'

Jerome, the friend of the great Bohemian reformer, John Huss, was a native of this city, and was thence surnamed 'of Prague.' He suffered the same fate as his illustrious friend, having been burnt alive, in pursuance of a sentence of the Council of Constance, on the 30th of May, 1416. Prague was taken by the Prussians under Frederick the Great in 1741, but they were soon after

obliged to evacuate the city, and it has ever since belonged to Austria.

PRATO, a town of Central Italy, prov. Florence, on the Bisenzio, a tributary of the Arno, 10 m. N.E. Florence. Pop. 12,135 in 1862. The town is surrounded with a wall and ditch; the streets are regular, and the houses generally good. It has several squares, of which the best is the Piazza Mercatale; but the chief ornament of the town is the cathedral, a fine edifice of white marble, with ornamental parts of dark serpentine. Several other churches are handsome and worth notice. Prato has two workhouses, several hospitals, the Cicognini college for secular instruction, normal Lancastrian and infant schools. The manufacture of straw hats and bonnets employs nearly 1,000 females; and it has also manufactories of woollen stuffs and caps, the latter for exportation to the Levant; with iron and copper works, paper-mills, a rope-walk, and a glass factory. In the middle ages, Prato was the cap. of the republic, conquered by the Florentines in 1353. The poet Casti was a native of the town.

PRAYA (PORTO), a sea-port town of the Cape de Verd Islands, which see.

PRENZLOW, a town of Prussia, the chief place in that part of Brandenburg called the Ucker Mark, at the point where the river Ucker escapes from the lake of that name, 32 m. WSW. Stettin, on the railway from Stettin to Wismar. Pop. 14,695 in 1861. The town is thriving and well-built; has various churches, schools, and hospitals, a valuable public library, and manufactures of linen, woollens, and tobacco, with breweries and tanneries. In 1806, a conflict took place in the suburbs of this town, which ended in the surrender to the French of 20,000 Prussian troops, escaped from the battle of Jena.

PRESBURG, or PRESSBURG (Hungar. *Pozsony*, an. *Posonium*), a royal free town, formerly the cap. of Hungary, immediately within its W. frontier, cap. co. of its own name, on the N. bank of the Danube, 34 m. E. by S. Vienna, on the railway from Vienna to Pesth. Pop. 43,863 in 1857. The town stretches along the banks of the Danube, and offers a great number of handsome buildings. It has, however, more of the characteristics of a German than a Hungarian city, and has few public buildings worth notice. The most conspicuous of the latter is the castle, a huge square brick structure, built upon a height above the town. It is now a ruin, having been burnt in 1811, by an Italian regiment in the French service; it is, however, memorable as the scene of the appeal made in 1741 by Maria Theresa to the Hungarian states, which was so generously responded to by the latter. The hall of the diet, or *landhaus*, is a plain unpretending edifice, both externally and internally. The cathedral, a Gothic edifice, supposed to date from the 11th century, and in which the kings of Hungary are crowned; the county-hall, German theatre, barracks, and archbishop's palace, are the other principal public buildings. There are several handsome noble residences, but they are seldom occupied, for Presburg is not a favourite place of abode with the Hungarian nobility. Presburg was formerly surrounded with walls, but it has long outgrown these, and they are now mostly demolished. It is a bishop's see, and the residence of the archbishop of Gran, primate of Hungary. It has a Rom. Cath. academy and a Calvinist lyceum, both possessing good libraries; a Cath. high gymnasium, Cath. seminary, college for poor students, and various other public schools; 5 hospitals, including one supported by the Jews, who are very numerous here, and have a quarter to themselves; and many charitable institutions. A fine library,

belonging to Count Appony, is open to the public. The manufactures, which are various, include silk and woollen goods, saltpetre, rosoglio, and tobacco; and the town has a large transit trade in corn, linen, and Hungarian wines. Immediately outside the town is the *königsberg* (king's mountain), a small circular mound to which the king of Hungary formerly went to perform an important ceremony, immediately after his coronation. A very beautiful and fertile country extends along the other bank of the Danube, opposite Presburg; and on that side are the favourite resorts of the inhabs.; the promenade in the Au; public gardens; and arena, or theatre in the open air for national performances.

Presburg is very ancient. Joseph II. transferred its previous title of capital of Hungary to Buda. The treaty which gave Venice to the French and the Tyrol to Bavaria was concluded here in 1805.

PRESCOT, a market town, par., and township of England, hund. W. Derby, co. Lancaster, 8 m. E. by N. Liverpool, and 23 m. W. by S. Manchester. Pop. of par. 68,540, and of township, 5,136 in 1861. Area of par., 34,940 acres; do. of township, 240 acres. It is situated on high ground, over a large and rich coal-field, and consists of one long principal street, well paved and lighted with gas, on the old turnpike road between Liverpool and Manchester. The principal public buildings are a town-hall, sessions-house, prison, and mechanics' institute. The par. church, an ancient structure, has a modern tower and steeple 156 ft. in height, forming a conspicuous object to the surrounding country. The living is a vicarage, of the annual value of 893*l.*, in the gift of King's College, Cambridge, to which the manor belongs. In the out-townships are numerous district churches, the patronage of 6 of which is with the vicar. There are places of worship in the town for Wesleyan and Primitive Methodists, Independents, and Unitarians, besides which there are within the par. 3 Rom. Cath. chapels, and a great number of meeting-houses for different denominations of dissenters. A grammar school, with an endowment producing 160*l.* a year, has about 30 foundation boys (sons of inhabs.) with other pay scholars, those born and educated in the par. having a preference to 7 fellowships and several good exhibitions at Brasenose College, Oxford. Several almshouses, erected in 1708, furnish lodging for 19 old women; and there are numerous money charities. The other benevolent institutions are a ladies' charity, bible society, and savings' bank.

Prescot has long been celebrated for its manufacture of watch-tools and movements, in both of which branches it greatly excels; files, also, of first-rate quality, and engravers' tools, are made here. The manufacture of coarse earthenware has for many years been carried on, the clay of the neighbourhood being well adapted for such a purpose. Coal-mines are wrought in every direction round the town; it is estimated that upwards of 2,000 men are employed in the collieries within the par.; and Liverpool receives from Prescot its chief supply of coal. Many of the out-townships are very populous, St. Helen's and Eccleston having attained to some importance as manufacturing towns. Prescot has petty sessions, and a baronial court for the recovery of small debts. Markets on Saturday, and fairs on alternate Tuesdays.

PRESTEIGN, a parl. bor. and market town of S. Wales, hund. New Radnor, co. Radnor, near the S. bank of the Lug, in a fertile and well-cultivated valley, adjoining the confines of Herefordshire, 12 m. E. by N. Leominster. The par. of Presteign, which extends partly into Wigmore hund., co.

Hereford, had 2,383 inhabs. in 1861, of which the parl. bor. had 1,743. Presteign is a well-built town, and, notwithstanding its limited size, is the cap. of the co., the assizes and quarter sessions being held in it. The church, which is very ancient, has some curious monuments and fine old tapestry. The living, a rectory of the annual value of about 800*l.*, is in the gift of the Earl of Oxford. The Wesleyan and Primitive Methodists, and Baptists, have places of worship. The co. hall is a handsome structure, and there is also a co. gaol and a free-school. The latter, founded and liberally endowed in the reign of Elizabeth by a clothier of the town, furnishes a plain English education to between 50 and 60 boys; and there are other minor schools and Sunday schools attached to the church and the Wesleyan connection. At the N. end of the town is a fine circular mound, laid out in public walks, presented to the inhabs. by the Earl of Oxford. Presteign unites with New Radnor and other small bors. in sending 1 mem. to the H. of C. Registered electors in the whole bor., 401 in 1865. It is governed by a bailiff and constables.

The Rev. Richard Lucas, author of the 'Enquiry after Happiness,' was a native of Presteign, having been born here in 1648. The work now referred to, which has passed through a great number of editions, and is still held in considerable estimation, was written after the author had become blind.

PRESTON, a parl. and mun. bor., market town, and par. of England, in its own div. of hund. Amounderness, co. Lancaster, on the N. bank of the Ribble, 19 m. S. Lancaster, 28 m. NNE. Liverpool, and 211 m. NWN. London by London and North Western railway. Pop. of parl. bor. 82,985 in 1861. Area of parl. bor. (which comprises Preston and Fishwick townships), 2,560 acres. The town, which consists of a broad principal street, running NE. from the river, crossed by several others in different directions, is well built, well paved, with handsome dwelling-houses and thriving factories, having a perfect drainage, and good roads leading from it. The streets are well lighted with gas, and there is an abundant supply of water. The market-place, at the junction of Fishergate and Friargate, contains about 3,000 sq. yds. The public buildings comprise an elegant court-house, erected in 1826, a town-hall, built in 1863, from designs of Mr. G. G. Scott; an exchange or market-house, assembly-rooms, theatre, borough prison, House of Recovery, and a large county penitentiary. The church, originally erected in the 16th century, was rebuilt in 1770: the living is a vicarage, of the annual value of 665*l.*, in the gift of the trustees of Huline's charity. There are also 11 district churches, chiefly of modern erection, and several others have been built in the out townships. The places of worship for dissenters comprise four for Rom. Caths. (a numerous and increasing body), and others for Wesleyan Methodists, Independents, Unitarians, Huntingdonians, Primitive Methodists, Baptists, Sandemanians, and the Society of Friends. National schools are attached to the several churches; and all or most of the dissenting places of worship have large Sunday schools, furnishing religious instruction to between 7,000 and 8,000 children. A grammar school, founded prior to 1688, has an endowment of 50*l.* a year: there is, also, a partially endowed blue-coat school, and several day and infant schools, supported by subscription. The other charities comprise nine almshouses, and several money bequests; a dispensary, house of recovery, built in 1829; provident society, work-

house, and savings' bank. Among the literary establishments, the first place is due to the Preston Institution for Diffusing Useful Knowledge, which has a library of about 3,000 vols., and an excellent museum. The Palatine and Dr. Shepherd's libraries are open to all classes, and the town has a public law library. An agricultural society was founded in the year 1811. Avenham Walk, on the summit of the hill which rises from the banks of the Ribble, is a favourite promenade, and is kept in order at the cost of the corporation.

Preston, from its central position, its vicinity to an important coal district, and its extensive means of communication with the interior by canals and railways, united to the skill and enterprise of its citizens, has of late years rapidly increased in wealth and pop., and is now one of the great seats of the cotton manufacture. The manufacture dates from the year 1791, and at present employs about 28,000 hands, including the trades connected with it. The manufacture of linen cloth, formerly the principal branch of industry in Preston, is still pretty extensively carried on, and employs about 2,000 hands. It has also numerous iron foundries, and establishments for making machinery and other articles. Leather is tanned in considerable quantities; and there is a small fishery on the Ribble, which abounds with salmon, smelts, and eels. The Ribble is navigable at spring tides, as far as Preston-marsh, for vessels of 250 tons. The navigation, which formerly was much impeded by sand-banks, has been improved by a company incorporated in 1837-38. The Lancaster canal, formed in 1796, passes the town; and it is connected with other parts of the co., and of England generally, by the North Union railway, which crosses the Ribble on a viaduct of five arches, 68 ft. above the river, the Lancaster and Preston railway, a portion of the great north-west line, the Preston and Longridge railway, the Bolton and Preston railway, and the Preston and Wyre railway, which last connects it with the new sea-port of Fleetwood, at the mouth of Wyre harbour, now rapidly rising in importance. Large markets on Saturday, with others on Wednesday and Friday for fish, butter, and vegetables. Great fairs in January, March, August, and November, the first of which called the 'Great Saturday,' is celebrated for its show of horses.

Preston is a bor. by prescription, and received its first charter from Henry II. By a subsequent charter, granted by Henry III., the officers of the bor. were authorised to hold a guild merchant for the renewing of the freedom of the burgesses, and other purposes. This privilege is made the occasion of great festivity. For a long time after their first institution, the guilds were held at irregular periods; but they have now for more than a century been celebrated every twentieth year, commencing on the Monday next after the decollation of St. John, which generally happens in the last week of August. Processions of the corporation, and the different trades in characteristic dresses, as well as of ladies, and females employed in the factories, take place on two of the days; and the amusements, which are varied and interesting, continue for a fortnight. But for civic purposes the guild books are open for an entire month. Under the Municipal Reform Act, Preston is divided into six wards, its municipal officers being a mayor and twelve aldermen, with thirty-six councillors. Quarter and petty sessions are held under a recorder. Quarter sessions for the hundreds of Amounderness, Blackburn, and Leyland, are also held here, and there is a county court.

Preston has sent two mems. to the H. of C. since the reign of Edward VI., the right of voting, down to the Reform Act, being in the inhabs. at large. The boundary Act enlarged the electoral limits, so as to include the township of Fishwick with the old bor. Reg. electors, 2,659 in 1865.

Preston is supposed to have risen on the decay of the ancient *Rerigonium*, or Ribchester, a city now reduced to the condition of a mere village, about 11 m. higher up the river; and it derived its name of *Priest's-town* from the number of religious houses established here, and of which there are still some remains. It was partly destroyed by Robert Bruce, in 1322. In the parliamentary wars of Charles I., its inhabs. declared for the king, and it was besieged and taken by Sir Thomas Fairfax. In 1715, the Jacobite insurgents took possession of the town, and erected barricades for its defence; but, after a brave resistance, they were compelled to surrender to the royalist force under General Willes. In 1745, Preston was visited by the Pretender, on his retreat; but he was compelled to withdraw on the approach of the Duke of Cumberland.

PRESTONPANS, a bor. of barony and sea-port town of Scotland, co. Haddington, on the shore of the Frith of Forth, 7½ m. E. Edinburgh. Pop. 1,577 in 1861. The town is straggling and ill-built, consisting principally of a single street parallel to the Frith of Forth. It derives its name from its having, for a lengthened period, had a number of salt-works or *pans* for the production of salt by the evaporation of the sea water, and for the refining of rock salt. The latter branch of the business is now the only one that is carried on. It has also works for the manufacture of coarse pottery. There are extensive oyster beds in the vicinity of the town, whence the Edinburgh markets derive a large proportion of their supply. Morrison's Haven, the port of Prestonpans, about ½ m. W. from the town, is a small creek, with not more than 10 ft. water at springs.

Near this village, on the 21st of Sept. 1745, the royal army, under Sir John Cope, consisting of about 2,100 regular troops, was totally defeated and dispersed, with great loss, by the Highlanders, who were but little superior in point of numbers, under the Pretender. The king's troops being panic-struck threw away their arms, and fled at the first fire, and were cut down almost without resistance.

PREVEZA, a town of Turkey in Europe, prov. Albania, at the entrance of the Ambracian Gulf, 58 m. SSW. Yanina. Pop. estim. at 5,000. The town is ill-built, badly paved and dirty; but it is in a good situation for commerce, and was formerly the entrepôt of the trade of Epirus. On the isthmus, connecting the peninsula upon which it stands with the mainland, are the remains of Nicopolis, consisting of the ancient walls, a theatre, some baths, and various other vestiges of antiquity.

PRINCE EDWARD'S ISLAND (formerly St. John's), an island of N. America, belonging to Great Britain; in the Gulf of St. Lawrence, principally between the 46th and 47th degs. of N. lat., and the 62nd and 64th of W. long., from 20 to 25 m. E. New Brunswick. Length, of a curved line passing through its centre E. to W., about 140 m.; greatest breadth, 34 m. Area estimated at 1,380,700 acres, or about 2,150 sq. m. Pop. 80,857 in 1861, principally Highland Scotch, Irish, and Acadian French, with Englishmen, Dutchmen, Americans, and Swedes. A chain of hills of moderate height partly intersects it; but the surface in general is level, or at most only undulating.

It is well watered, and its shores are deeply indented with numerous bays. The climate is milder than in any of the surrounding British colonies, and appears to be favourable to longevity. The atmosphere is nearly free from the fogs prevalent in Cape Breton and the adjacent countries. Below the thin vegetable mould the soil is generally clay or loam, resting on a base of sandstone: there are some swamps and pine barrens; but these bear only a small proportion to the whole surface. The island in general is well wooded, the principal trees being spruce, fir, beech, birch, and maple. Oak, ash, and larch are scarce, and the quality of the first is very inferior. All kinds of grain and vegetables raised in England come to perfection. Wheat is, at present, the principal object of attention; but it is an uncertain crop. Potatoes have been extensively cultivated, and have had the same mischievous consequences here as in Ireland and elsewhere. Flax of excellent quality is raised, and manufactured into linen for domestic use. Hemp will grow, but not to the same perfection as in the adjacent colonies. It is said, that had the natural advantages of this island been turned to proper account, it might at this time have been the granary of the British colonies, instead of barely supporting a poor and limited population. Of nearly 1,400,000 acres contained in the island, only 10,000 are said to be unfit for the plough; but only 216,000 are now under cultivation. The origin of this state of things is ascribed, in Lord Durham's report, to the injudicious grants made to absentee proprietors, under conditions that have been totally disregarded. 'The absent proprietors neither improve the land, nor will let others improve it. They retain it, and keep it in a state of wilderness.' (Report, pp. 70-86.) What land is under the plough is cultivated in a very slovenly manner; though the establishment of an agricultural society of late years has done something to improve husbandry.

Pastures are good, and suitable for cattle and sheep: owing to the want of proper attention, hogs are said not to thrive so well as the former. Live stock used to suffer greatly from the ravages of bears, loup-cerviers, and other wild animals; but these are much less numerous now than formerly. The island has no mines. Its fisheries might be of considerable importance; but, owing to the want of capital and of a taste for the business, they are all but wholly neglected, and left to the undisturbed possession of the Americans. A good many ships are built in the colony: 66 vessels, of 8,837 tons, were built in 1860; 67 vessels, of 9,000 tons, in 1861; and 73 vessels, of 12,875 tons, in 1862. The total value of the imports, in 1862, was 211,240*l.*, and of the exports, 150,550*l.* The principal trade is with the other provs. of B. N. America. Total colonial revenue, 25,600*l.* in 1862.

The constitution is nearly similar to that of Nova Scotia, and in all civil matters independent of any jurisdiction in America. The government and legislature is vested in a licut.-governor, a council of nine members, and a house of assembly of thirty representatives, elected by the people. The governor is chancellor of the court of chancery; the chief justice and attorney general are appointed by the sovereign; and the high sheriff is appointed annually by the local government. In the supreme court of judicature all criminal and civil matters of consequence are tried by jury. Cases of petty debt and breaches of the peace are decided by special magistrates and justices of the peace. There are superior schools in Charlotte Town, and numerous district schools. Charlotte Town, the cap. and seat of government, on Hills-

borough river, near the S. coast, has one of the best harbours in the Gulf of St. Lawrence. The town, on gently rising ground, is regularly built, and clean, with about 6,000 inhabs. The court-house, episcopal and Scotch churches, several chapels, the barracks, and the fort are its only conspicuous public buildings.

This island was taken from the French in 1758. It was annexed, with Cape Breton, to the government of Nova Scotia in 1763, but since 1768 has formed a separate colony.

PRINCE OF WALES'S ISLAND (native *Pulo Pinang*, 'the Areca island'), an island and British settlement in the Eastern Seas, about 2 m. from the W. coast of the Malay Peninsula; lat. 5° 15' N., long. 100° 25' E. Length, N. to S., nearly 16 m.; breadth varying from 8 to 12 m. Area about 160 sq. m. Pop. 42,160 in 1861, principally Malays, Chinese, and Chuliahs, the Europeans being under 800. The N. part of the island is mountainous, and a range of hills runs through its centre, declining in height as it approaches the SW. extremity. But two-thirds of the whole surface are level, or of gentle inclination, and, like the hills, covered with woods. The thermometer, in the plains, ranges between 76° and 90° Fahr., and on the higher hills at from 64° to 76°. Except in a few places, Pinang is considered very healthy. Refreshing showers fall at short intervals throughout the year. The climate of the high lands is said to resemble that of Funchal in Madeira. The geological formations are primitive: nearly all the hills are of granite, and the subsoil, where not alluvial, is principally the detritus of that rock. Tin ore is found at the base of the mountains. The island produces a good deal of timber, well adapted for ship-building and masts, and fine fruits; and the soil is favourable to the growth of spices. As a commercial mart, however, this settlement is much inferior to Singapore.

The attention of the agriculturists is almost exclusively directed to the improvement and extension of the spice plantations, and dry waste land for that purpose may be obtained from the government on leases of 40 years, at a small quit-rent. A good many cocoa-nuts are grown; and gambir, indigo, cotton, areca, and tobacco in small quantities. Coffee, sugar-cane, betel nut and leaf, rice, cotton, and ginger are also raised. The trade of Pinang is chiefly that of transit, between Great Britain and British India on the one hand, and the Malay Peninsula and Tenasserim, provs. Siam, Anam, Borneo, Java, Sumatra, and China, on the other. A considerable trade in cotton cloths is kept up by the Chuliahs with the Coromandel coast.

George Town, the cap., at the N.E. extremity of Pinang, has a pop. of about 13,000. It is built on level ground, and consists of a long and broad street, intersected by others of inferior dimensions. It has a fort, a handsome church, an Armenian chapel, two Rom. Catholic chapels, a court-house, gaol, public school, poor-house, the governor's offices, and the civil and military hospitals. A few shops are kept by Europeans, but the major portion by Chinese. There are cantonments for the native troops near the town. Pinang was purchased by the East India Company in 1786.

PROVENCE, one of the former provs. of France, in the SE. part of the kingdom, now subdivided into the déps. Basses-Alpes, Bouches-du-Rhône, Var, and a portion of Vaucluse.

PROVIDENCE, a city and port of entry of the U. States, Rhode Island, of which it is the cap., being, also, the second city of New England in point of pop., wealth, and commerce. It stands at

the head of the tide-water in Narragansett Bay, about 30 m. from the Atlantic, 40 m. SSW. Boston, with which it is connected by railway. Pop. 50,560 in 1860. The town stands on elevated ground on both sides Providence River, an arm of the bay, here crossed by two bridges, one 90 ft. in width. It is a well-built, handsome, thriving town. Its chief public buildings are the state house, Brown university, and the *arcade*. The last was finished in 1828; it is 222 ft. in depth: has 2 granite fronts 72 ft. in width, ornamented with Doric colonnades, and cost, in all, about 130,000 dolls. Providence has numerous churches, schools, and charitable institutions. Brown University, founded at Warren in 1764, and removed thither in 1770, comprises 3 colleges, and is governed by a board of trustees and fellows, all of whom must be Baptists. It has a library of 28,000 vols., and a very complete philosophical apparatus, and is attended by above 150 students. The Friends have a boarding-school here, which has about 200 pupils. There are several literary societies, which possess libraries, and many extensive private seminaries.

Providence is distinguished as a manufacturing town: its cotton factories employ from 14,000 to 18,000 spindles; and it has extensive bleaching-grounds and dye-houses; iron foundries, and machine-factories for the production of cotton machinery; with manufactures of combs, jewellery, glass wares, leather, boots and shoes, soap, candles, and furniture. Pawtucket, about 4 m. N.E., is also the seat of extensive cotton manufactures, the products of which find an outlet at Providence. Vessels of the largest burden come close to the wharfs, and the navigation of the bay is not often impeded by ice.

Providence communicates with Boston, and with Stonington in Connecticut, by railways; with Worcester (Massachusetts) by the Blackstone canal; and steamboats of a large class keep up a daily communication with New York. It was originally settled in 1636, by Mr. Roger Williams, to whom is ascribed the honour of having established the first political community in which perfect religious toleration was admitted. It was incorporated as a city in 1831.

PROVIDENCE, one of the Bahama Islands, which see.

PRUSSIA, one of the great European kingdoms, between the 49th and 56th deg. N. lat., and the 6th and 23rd deg. E. long. The principal part of the Prussian dominions lies continuously along the S. shore of the Baltic, between Russia and Mecklenburg, comprising the N. part of what was formerly Poland, and most part of the N. of Germany. The inland frontier of this part of the monarchy on the E. and S. is sufficiently connected; but on the W. side it is very ragged, some small independent states being almost entirely surrounded by the Prussian dominions. But, exclusive of this principal portion, there is an extensive Prussian territory on both sides the Rhine, divided into the provinces of Westphalia and Rhine. This portion is separated from the rest of the monarchy, or from what may be called the Eastern States, by Hesse-Cassel and part of Hanover and Brunswick. Some detached territories in Saxony, and the principalities of Hohenzollern in the kingdom of Württemberg, also belong to Prussia.

Eastern Prussia has on the N. the Baltic; on the E. Russia, Russian Poland, and Cracow; and on the S. and W. the Austrian states of Galicia, Moravia, and Bohemia, with Saxony and other German states. W. Prussia, or the provinces on the Rhine, have on the N. and E. Hanover and other

German states; on the S. France; and on the W. Belgium and the Netherlands. From the extreme eastern frontier of Prussia to Aix-la-Chapelle, in an ENE. and WSW. direction, the distance is about 775 m.; and from the promontory on the Baltic, above Stralsund, to the extreme southern frontier of Silesia, in a NE. and SW. direction, the distance is 404 m. Owing, however, to the irregularity of the frontier, and the intervention of other countries, these measurements give no information as to the extent of the monarchy.

Growth of Prussia.—The rise of the Prussian power has been rapid and extraordinary. The kings of Prussia are descended from petty German princes, who, in the 14th century, were burgraves of Nuremberg. In 1415, Sigismund, emperor of Germany, sold the marquisate (afterwards electorate) of Brandenburg to Frederick, one of these burgraves, for 400,000 ducats, who, by this purchase, laid the foundation of the future grandeur of his family. In 1515, Albert, margrave of Brandenburg, was elected grand master of the Teutonic knights, who then possessed Ducal Prussia; and by a treaty concluded in 1525, this territory was secularised and erected into a duchy in favour of Albert and his successors. In 1657, Prussia was acknowledged by Poland to be a free and independent state; and, after other aggrandisements, it was advanced to the dignity of a kingdom in 1700. Pomerania was not long after added to Prussia. But notwithstanding these acquisitions, when Frederick the Great ascended the throne, in 1740, his disjointed dominions did not contain 2,500,000 inhabs., who had made but little progress in the arts, or in the accumulation of wealth. But this extraordinary man, with no extrinsic assistance, and by mere dint of superior talent, wrested, in the early part of his reign, the valuable and extensive province of Silesia from the house of Austria. He afterwards defended himself, during the seven years' war, against the combined efforts of Austria, Russia, and France, and forced these powers to conclude a treaty, by which Silesia was solemnly guaranteed to Prussia. In the latter part of his reign, in conjunction with Russia and Austria, Frederick planned, and partly carried into effect, the partition of Poland, acquiring as his share the western parts of Prussia, and secured, in addition to the increase of territory, an unrestricted communication between the great divisions of his kingdom.

By these different acquisitions, Prussia, at the death of Frederick, in 1786, had been increased in size nearly a half; while, owing to the superior fertility of the conjoined provinces, and the improvement effected in every part of his dominions, after the peace of 1763, the pop. had increased to about 6,000,000. Prussia acquired, by the subsequent partition of Poland in 1792, and its final dismemberment in 1795, a great extension of territory, including the important city of Dantzic, and upwards of 2,000,000 inhabs. In addition to this she acquired the bishopric of Paderborn and the principalities of Bayreuth and Anspach, with several lesser districts in Germany; so that, in 1805, the kingdom contained nearly 5,000 geog. sq. miles of territory, and a pop. of 9,640,000. Her disastrous contest with France in 1806 lowered Prussia for a while; but the spirit of the people was not subdued; and after Napoleon's campaign in Russia, the pop. rose *en masse*, and the zeal and bravery of the Prussians were mainly instrumental in effecting the final overthrow of Napoleon. At the general peace of 1815, Prussia became more powerful than ever. She recovered all her former possessions, except a portion of her Polish dominions assigned to the kingdom of Poland; but

this was more than compensated by valuable acquisitions in Saxony, Pomerania, and the Rhenish provinces.

Divisions and Extent of the Country.—Population.—The Prussian monarchy is divided, for administrative purposes, into eight provinces, which again are subdivided into twenty-six districts. Not included in these divisions are the principalities of Hohenzollern, ceded to the king in 1849, and the district and bay of Jahde, or 'Jahdegebiet,' which the government purchased, in 1854, from Oldenburg, for the sum of 500,000 thalers, or 74,800*l.*, as a harbour for the Prussian fleet in the North Sea. The following was the population of Prussia, according to the census of December 3, 1861:—

| Provinces and Districts | Civil | Military | Total |
|--|------------|----------|------------|
| I. Prov. of Prussia: | | | |
| 1. Königsberg | 972,031 | 10,867 | 982,898 |
| 2. Gumbinnen | 692,654 | 3,818 | 696,472 |
| 3. Dantzic | 464,855 | 11,466 | 476,321 |
| 4. Marienwerder | 706,148 | 6,683 | 712,831 |
| Total | 2,835,688 | 32,834 | 2,868,522 |
| II. Posen: | | | |
| 5. Posen | 950,702 | 12,812 | 963,514 |
| 6. Bromberg | 510,073 | 5,184 | 515,257 |
| Total | 1,460,775 | 17,996 | 1,478,771 |
| III. Pomerania: | | | |
| 7. Stettin | 642,378 | 12,668 | 655,046 |
| 8. Köslin | 518,261 | 5,193 | 523,454 |
| 9. Stralsund | 207,659 | 3,009 | 210,668 |
| Total | 1,368,298 | 20,770 | 1,389,068 |
| IV. Silesia: | | | |
| 10. Breslau | 1,276,199 | 17,895 | 1,294,094 |
| 11. Oppeln | 1,126,323 | 11,574 | 1,137,897 |
| 12. Liegnitz | 945,082 | 11,731 | 956,813 |
| Total | 3,347,604 | 41,200 | 3,388,804 |
| V. Brandenburg: | | | |
| 13. Berlin | 522,974 | 22,345 | 545,319 |
| 14. Potsdam | 923,740 | 21,339 | 945,079 |
| 15. Frankfurt | 961,386 | 11,731 | 973,117 |
| Total | 2,408,100 | 55,415 | 2,463,515 |
| VI. Saxony: | | | |
| 16. Magdeburg | 766,610 | 13,124 | 779,734 |
| 17. Merseburg | 819,865 | 11,690 | 831,555 |
| 18. Erfurt | 359,043 | 5,600 | 364,643 |
| Total | 1,945,518 | 30,414 | 1,975,932 |
| VII. Westphalia: | | | |
| 19. Münster | 437,004 | 5,380 | 442,384 |
| 20. Minden | 465,105 | 6,977 | 472,082 |
| 21. Arnsberg | 701,179 | 2,077 | 703,256 |
| Total | 1,603,288 | 14,434 | 1,617,722 |
| VIII. Rhine Prov.: | | | |
| 22. Köln | 557,311 | 10,124 | 567,435 |
| 23. Düsseldorf | 1,106,580 | 10,445 | 1,117,025 |
| 24. Coblenz | 520,989 | 8,829 | 529,818 |
| 25. Trier | 537,152 | 7,076 | 544,228 |
| 26. Aachen | 454,674 | 3,768 | 458,442 |
| Total | 3,176,706 | 40,242 | 3,216,948 |
| Principalities of Hohenzollern | 64,408 | 253 | 64,661 |
| Jahdegebiet | 950 | — | 950 |
| Total | 18,229,235 | 253,508 | 18,482,743 |
| Prussian Troops of occupation in Frankfort-on-the-Maine, Luxemburg, Mayence, & Bastadt | — | 14,715 | 14,715 |
| Total Population of the Kingdom | 18,229,235 | 268,223 | 18,497,458 |

The subjoined table gives the area of the kingdom, in geographical and English sq. m.:—

| Provinces and Districts | Area in Geog. Sq. Miles | Area in Eng. Sq. Miles |
|------------------------------|-------------------------|------------------------|
| Province of Prussia— | | |
| Königsberg | 408.13 | |
| Gumbinnen | 298.21 | |
| Dantzic | 152.28 | |
| Marienwerder | 319.41 | |
| Total | 1178.3 | 24,860 |
| Posen— | | |
| Posen | 321.68 | |
| Bromberg | 214.83 | |
| Total | 536.51 | 11,330 |
| Pomerania— | | |
| Stettin | 236.88 | |
| Köslin | 258.43 | |
| Stralsund | 79.02 | |
| Total | 574.33 | 12,130 |
| Silesia— | | |
| Breslau | 248.14 | |
| Oppeln | 243.06 | |
| Liegnitz | 250.54 | |
| Total | 741.74 | 15,666 |
| Brandenburg— | | |
| Potsdam and Berlin | 382.51 | |
| Frankfurt | 851.63 | |
| Total | 1234.14 | 13,505 |
| Saxony— | | |
| Magdeburg | 210.13 | |
| Merseburg | 188.76 | |
| Erfurt | 61.74 | |
| Total | 460.63 | 9,729 |
| Westphalia— | | |
| Münster | 132.17 | |
| Minden | 95.68 | |
| Arnsberg | 140.11 | |
| Total | 367.96 | 7,771 |
| Rhine prov.— | | |
| Cologne | 72.40 | |
| Düsseldorf | 98.32 | |
| Coblenz | 109.64 | |
| Treves | 131.13 | |
| Aix-la-Chapelle | 75.05 | |
| Total | 487.14 | 10,289 |
| Total area | 5,080.48 | 107,300 |

Adding to the above the principalities of Hohenzollern, comprising 452 English sq. m., and the 'Jahdegebiet' of 5 sq. m., the total area of the kingdom comprised 107,757 English sq. m. at the census of 1861.

Face of the Country.—Mountains.—The surface of the Prussian states is generally flat. With the exception, indeed, of part of the Hartz Mountains, in the prov. of Saxony, the Teutoburger Wald, and some other mountains in Westphalia and Saxony, the volcanic district in it and the Lower Rhine, and the Riesengebirge, or Giant's Mountains, on the SW. confines of Silesia, there is no other tract that is more than hilly. Prussia is, in fact, a country of vast plains, and is in most parts so very level, that many marshes and small lakes have been formed by the inundations of the rivers. The eastern, or principal part of the monarchy, slopes imperceptibly from the S. frontier towards the Baltic, the shore of which is low and sandy. From this circumstance, and the nature of the soil, which in many places consists of little else than mere loose sand, some geologists have supposed that the sea had at one time overspread the greater part of its surface, and there would seem to be considerable plausibility in the supposition. At a comparatively recent period the country was co-

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vered in most parts with immense forests, of which there are still very extensive remains. These, when they belong to the crown, are under the control of the administration of forests.

Soil.—The quality of the soil is very various. In Brandenburg and Pomerania it is generally poor; in many parts, indeed, it consists of tracts of loose barren sand, diversified with extensive heaths and moors; but, in other parts, particularly along the rivers and lakes, there is a good deal of meadow, marsh, and other comparatively rich land. In Ducal Prussia and Prussian Poland, including the prov. of Posen, the soil consists generally of black earth and sand, and is in many parts very superior. But Silesia, and the Saxon and Rhenish provs., are naturally, perhaps, the most productive. The plain of Magdeburg, on the left bank of the Elbe, is perhaps the most fertile and best cultivated district of the monarchy.

Rivers and Lakes.—Prussia is extremely well watered. The Rhenish provs. are traversed by the Rhine, while their E. frontier is partly formed by the Weser. The Elbe traverses the Saxon provs.; the Oder, which is almost entirely a Prussian river, runs through the whole extent of the monarchy, from the S. frontier of Silesia to the Isle of Usedom, where it falls into the Baltic. Polish Prussia (or Posen) is watered by the Wartha; West Prussia by the Vistula; and Ducal Prussia by the Pregel and Niemen. And, besides the above, there are many other large rivers, as the Ems, Moselle, Spree, Havel, Netze, &c.

Owing to the flatness of the country through which they flow, none of the great rivers are interrupted by cataracts, and they are all navigable—the Rhine, Elbe, and Vistula, throughout their whole course in the Prussian dominions; the Oder is navigable, for barges, as far as Ratibor in S. Silesia; and the Pregel and Niemen to a considerable distance inland. The establishment of steam-packets on these rivers, and the freeing of the navigation of the Rhine and the Elbe from the oppressive tolls and regulations by which it was formerly obstructed, have already been, and will no doubt continue to be, of vast service to the country. Canals have also been constructed connecting the Elbe, the Oder, and the Vistula; so that goods shipped at Hamburg may be conveyed by water to Dantzic and conversely. (See the accounts of these rivers, under their different names.)

Lakes are exceedingly numerous, particularly in Ducal Prussia and Pomerania. There are also along the coast several large bays, or rather lagoons, communicating with the sea by narrow mouths, and possessing more of the character of freshwater lakes than of arms of the sea. They are denominated *Haffs*, the principal being the Curische Haff and the Frische Haff, on the coast of Ducal Prussia, and the Haff at the mouth of the Oder.

Seaports.—The principal sea ports are Memel, Königsberg, Pillau, Dantzic, Stettin, and Stralsund. With the exception of Stettin, or rather of its outport, Swinemunde, the water at these ports is rather shallow, seldom exceeding from 10 ft. to 12 ft. But at Swinemunde there are from 19 ft. to 21 ft.

Climate.—The climate of Prussia is not less various than the soil. Along the Baltic it is moist, and in Ducal Prussia, especially, the winter is long and severe. It is also severe in the S. parts of Silesia, contiguous to the Carpathian mountains. In N. Silesia, Brandenburg, and the Saxon and Rhenish provinces, it is comparatively mild.

Minerals.—The Prussian monarchy is richer in minerals than might have been anticipated from

its flatness. Iron is the most generally diffused. It is very extensively wrought in Silesia, principally on account of the crown, but also by private individuals. The iron-works in the Rhine provs., near Dortmund, Solingen, Iserlohn, &c., and those near Schmideberg, Tarnowitz, Sprottau, &c., in Silesia are very extensive. Coals are very abundant in the Rhenish provs., Saxony, and parts of Silesia, and large quantities are annually produced. Salt, which is a government monopoly, is produced principally in the Saxon provs., which also yield considerable quantities of copper and some silver. Silesia furnishes annually large quantities of zinc, lead, and tin; but the last-mentioned metal is partly, also, supplied by Brandenburg. Amber has long been known as a product of Prussia. It is principally formed along the low narrow tongue of land between the Curische Haff and the sea.

In distinguishing the mineral products into I. metals; II. combustible minerals; III. stones; IV. clay, sand, earth; V. salt, alum, &c.—there are in Prussia,

I. Metals.

Silver, in Saxony (Maarfeld); Westphalia (Siegen); Silesia.

Copper, Saxony (Maarfeld); Westphalia (Siegen); Silesia.

Lead, Silesia, Rhine, Westphalia, Saxony.

Iron and steel, in every province, but principally in the mountains of Silesia, Westphalia, and Rhine.

Cobalt, Westphalia (Siegen), and Saxony.

Arsenic, Silesia.

Calamine and zinc, Silesia, Rhine, and Westphalia.

II. Combustible Minerals.

Sulphur, Silesia.

Amber, Prussia.

Pit-coal, Silesia, Westphalia, Rhine, Saxony.

Brown-coal, Saxony and Rhine.

Turf, in every province, principally in Brandenburg.

III. Stones.

Amethyst, agate, in Silesia.

Alabaster, Saxony.

Marble, Westphalia, Saxony, Rhine, Silesia.

Volcanic tephra, Rhine province, and very important.

Serpentine stone, Silesia.

Of sandstone, mill-stones, in Silesia, Saxony, Westphalia, Rhine.

Grinding or whet-stones, in Westphalia, Silesia, Saxony.

Limestone, in Silesia, Westphalia, Rhine, Saxony, Brandenburg.

Gypsum, in the same provinces as limestone.

Slate, Westphalia and the Rhine.

IV. Clay, Sand, Earths.

Porcelain earth in Saxony, near Halle.

Pipe-clay and fuller's earth, Silesia.

Sand, suitable for the fabrication of glass, in all provinces.

Brick-clay and marl, in all provinces.

V. Salt.

Kitchen salt, in Saxony, Westphalia, Pomerania, Rhine.

Alum, Silesia, Saxony, Westphalia, Rhine, Brandenburg.

Saltpetre, in some provinces.

In the year 1861 there were produced in the monarchy 235,189,996 centners of coal; 19,969,019 centners of iron ore; 1,898,092 centners of copper ore; and 6,573,637 centners of zinc ore. The total value of ore produced in the Prussian mines, in 1861, amounted to 31,234,628 thalers.

Vegetable and Animal Productions.—These do not differ materially in Prussia and Great Britain. Rye and wheat, with buck-wheat, oats, barley, potatoes (now very extensively cultivated), and flax and hemp, are the principal products of Prussian agriculture. About 700,000 cimers of very fair wine are made in the Rhenish provs. It is mostly consumed in the country, the exports being so very trifling as not to exceed from 5,000

to 6,000 eimers a year. The average price of Prussian wine may be estimated at from 15 to 20 rix-dollars per eimer. The animals of Prussia are the same as those of this country, except that wolves and wild boars, which were long since exterminated in Great Britain, continue to exist in considerable numbers in the Prussian territories.

Agriculture.—Down to a comparatively recent period, the state of landed property in Prussia, and the condition of the occupiers of the soil, was similar to its state and their condition in most parts of continental Europe. The country was mostly divided into considerable estates; and, down to 1807, none but nobles or privileged persons could acquire landed property. Such parts of an estate as were not in the immediate possession of the lord were held by occupiers, in a sort of predial slavery, on condition of their paying a certain rent, consisting sometimes of services to be performed on the lord's land, sometimes of the delivery of a certain proportion (generally a half) of the produce, and more frequently, perhaps, of both the one and the other. In some places the tenants had acquired a sort of hereditary right to their possessions on their making the accustomed payments; but in other parts the title to the lands they occupied was only for life, or for a certain number of years; though, by a most absurd regulation, the proprietor could not then resume the lands into his own hands, but was obliged to re-let them to an occupier of the same grade as the one who had left them. In 1807, however, the regulation which prevented peasants, tradesmen, and others of the lower classes from acquiring land was abolished; and, in 1811, appeared the famous edict which enacted that all the peasants who held perpetual leases on condition of paying certain quantities of produce, or of performing certain services on account of the proprietors, should, upon giving up one-third part of the land held by them, become the unconditional proprietors of the other two-thirds. With respect to the other classes of peasants, or those who occupied lands upon life-leases, or leases for a term of years, it was enacted that they should, upon giving up half their farms, become the unconditional proprietors of the other half. This edict effected the greatest and most sweeping change that was ever peaceably made in the distribution of property in any great country. It was regarded at the time as a dangerous interference with the rights of individuals. But the abuses which it went to eradicate were so injurious to the public welfare, and were, at the same time, so deeply seated, that they could not have been extirpated by any less powerful means. It has given a wonderful stimulus to improvement. The peasantry, relieved from the burdens and services to which they were previously subjected, and placed, in respect of political privileges, on a level with their lords, have begun to display a spirit of enterprise and industry that was previously unknown. Formerly, also, there were in Prussia, as there have been in England and most other countries, a great extent of land belonging to towns and villages, and occupied in common by the inhabs. While under this tenure these lands rarely produce a third or fourth part of what they would produce were they divided into separate properties, and assigned to individuals, each reaping all the advantages resulting from superior industry and exertion. The Prussian government being aware of this, succeeded in effecting the division of a vast number of common properties, and thus totally changed the appearance of a large extent of country, and created many thousand new proprietors. The want of capital and

the force of old habits rendered the influence of these changes at the outset less striking than many anticipated; but these retarding circumstances have daily diminished in power; and, despite the too great extension of the potato, it may be safely affirmed that the country has made a greater progress since 1815 than it did during the preceding two hundred years.

Rye used to be in Prussia an article of universal consumption, occupying the same place there that wheat occupies in England, and potatoes in Ireland. But of late years it has been, to a great extent, superseded by the potato, the culture of which has increased with a rapidity to which there is no parallel. It now, in fact, forms the principal dependence of a large proportion of the pop. The usual agricultural course is to fallow every third year, taking either first a crop of rye, and then wheat, or conversely. The greater part of the wheat shipped at Dantzic is brought from the Polish provinces under Russia and Austria. Flax and hemp are cultivated for domestic use, and also for sale, in all parts of the monarchy, but especially in Silesia. The best flax is raised from foreign seed, the seed produced at home being used to make oil-cake. Tobacco, hops, madder, and other plants used in dyeing, are also raised. Chicory is largely cultivated. Beet-root plantations are very extensive, and have recently made great progress, especially in Saxony and Silesia.

Except on the crown estates, there are few farms. Most considerable landed proprietors are accustomed to manage their estates by stewards; and, as already seen, the smaller occupiers are mostly all proprietors. It is impossible to form any accurate estimate of the productiveness of the soil, differing as it does so very widely in quality and culture. In the most fruitful and best cultivated districts, as near Magdeburg, the produce of wheat is reckoned at from 14 to 16 *scheffel* the *morgen* (1 *scheffel* = 1.6 bushel; 1 *morgen* = 1.52 acre); whereas, in Brandenburg and Pomerania, the produce of wheat is not reckoned at more than from 6 to 10 *scheffel* the *morgen*. The produce of rye varies in the best districts from 4 to 8 *sch.* per *morgen*. But in the sandy and sterile portions of Pomerania, Brandenburg, and W. Prussia, the produce is often not more than 2 or 3 *sch.* per *morgen*. The rent of cultivated land is as various as the crops, being dependent partly on soil and partly on situation. In the immediate neighbourhood of Berlin, the best lands yield a rent of 15 rix-dollars per *morgen*; in the country around Magdeburg the rent is in general about 10 r. d. per do.; in Brandenburg, if it be not in the neighbourhood of Berlin, the rent is seldom more than 2½ r. d. per *morgen*; and in the sandy and sterile tracts, the rent is sometimes not more than 1 or 2 silver *groschen* per *morgen*.

Horses, cattle, and sheep are raised everywhere throughout Prussia. The growth of the latter has been of late years an object of much attention, particularly in Brandenburg, Saxony, and Silesia. In consequence of the improvements effected by the introduction of merino sheep into Germany, the wool of Saxony, Silesia, and some other provinces, has become superior even to that of Spain. The fall in the price of corn, subsequent to 1815, gave a great stimulus to this branch of industry. Wool now constitutes, in fact, the principal article of export from Germany, and has been productive of much wealth to many Saxon and Silesian proprietors, as well as to many in other provinces. Prussia contains, in round numbers, 1,600,000 horses, 8,000 asses and mules, 5,500,000 oxen, 15,400,000 sheep, 670,000 goats, and 2,600,000

swine. (Report of Mr. Lowther, British secretary of Legation, dated Berlin, Jan. 20, 1863.)

Manufactures.—Though more of an agricultural than a manufacturing country, Prussia has greatly distinguished herself, particularly of late years, in various branches of manufacture. The Rhenish provinces, Saxony and Silesia, are the districts most prominent in this department. Linens and coarse woollens for domestic consumption are made in every village, and, indeed, in most cottages throughout the kingdom. The linens that are exported are chiefly produced in Silesia, Westphalia, and the Ermeland, or portion of Ducal Prussia containing the circles of Braunschweig, Heilsberg, Rossell, and Allerstein. The total value of the linen stuffs annually manufactured is estimated at from 50 to 60 millions rix-dollars, of which a fourth part is exported. Hirschberg, and the adjacent towns and villages, are the principal seats of Silesian manufactures. Large quantities of silk and cotton goods, and linen, are produced in Elberfeld, and other towns in the Rhenish provinces. Very superior broad cloth is largely manufactured at Eupen, Malmedy, Berlin, and Aix-la-Chapelle. Prussia occupies a respectable rank in the production of the useful metals. The total quantity of bar and pig iron produced in 1861, amounted to 17,722,822 centners. The articles of hardware made at Iserlohn, Hagen, Solingen, Olpe, and Essen, enjoy a high reputation; but are inferior to the cast-iron articles, whether of fancy, ornament, or utility, produced at Berlin. These, as regards beauty and delicacy of execution, are unequalled by any made either in England or any other country. Porcelain, jewellery, watches, and coaches are largely produced at Berlin and other towns. Vast numbers of books annually issue from the presses of Berlin and Halle. Beer and spirits are very extensively produced, and consumed in all parts of the monarchy.

The principal manufacturing district of Prussia is in the Rhenish provinces on the Wupper, having Elberfeld and Solingen for its principal towns. It is well supplied with coal and water power; and the inhabs. are alike industrious and inventive. The pop. of Elberfeld, inc. Barmen, has increased during the present century from 11,720 to near 80,000, and the progress of many of the other towns and villages in the vicinity has been hardly less remarkable.

Some of the manufacturing establishments in the Rhine district are on a large scale, employing from 400 to 500 workpeople. The first steam-engine used in Prussia was set up in 1780. In 1862 there were about 2,000 steam-engines in the monarchy.

Commerce.—The exports from Prussia consist principally of corn, wool, timber, Westphalian hams, zinc, flax, bristles, salted provisions, and other articles of raw produce; with linen and woollen cloths, silk wares, iron and hardware, jewellery, watches, and wooden clocks, Prussian blue, spirits, and beer. The imports consist chiefly of sugar, coffee, and other colonial products, raw cotton, and cotton twist and stuffs, indigo and other dye stuffs, spices, French and other wines, coals for the use of the ports on the Baltic, and salt. The statistics of Prussia with regard to commerce are not given separately, but are included in the Zollverein calculation. (See GERMANY.) The value of the imports into the Zollverein, in 1858, amounted to 377,360,000 thalers; the exports for 1858 amounted to 375,000,000 thalers; making a total of 752,360,000 thalers; the proportion per inhabitant was 22 thalers 12 silver groschen. The value of the im-

port of the fiscal produce was 45,610,000 thalers. The amount of duty paid on imports was, in 1858, 28,302,000 thalers; the amount of duty without the fiscal produce was 14,255,000 thalers. The per-centage duty on imports to the total import was, in 1858, 7.50; without the fiscal produce, 4.30. The import of wheat was 1,266 hectolitres; the export of wheat was 4,233; of other grain the import was 5,646, the export 7,619. Of wine the import was 140,000, the export 124,000; of brandy the import was 23,000, the export 110,000. The export of horses, asses, and mules was 7,953; the import, 28,457. The import of oxen was 89,703; the export, 92,316. Of sheep the import was 124,991; the export, 162,770. Of swine the import was 322,935; the export, 24,068.

Of colonial goods (the centner = 100 kilogrammes) the import into the Zollverein of coffee was 575,004 centners; the export, 32,000 centners: of sugar the import was 349,546 centners, the export was 81,541: of tea the import was 15,080 centners: of tobacco the import was 252,351; the export was 833,443 centners: of iron, the import of casting iron was 2,000,306; the export, 74,061 centners: of bar-iron the import was 308,060; the export, 92,038 centners: of manufactured iron the import was 122,670; export, 248,830.

Of weaving materials there were imported into the Zollverein:—

| | Import | Export |
|----------------|----------|----------|
| | Centners | Centners |
| Wool— | | |
| Raw . . . | 181,809 | 58,740 |
| Spun . . . | 72,379 | — |
| Cotton— | | |
| Raw . . . | 549,336 | 141,275 |
| Spun . . . | 284,220 | 29,620 |
| Silk— | | |
| Raw . . . | 10,483 | 1,286 |
| Spun . . . | — | — |
| Hemp and Flax— | | |
| Raw . . . | 343,969 | 269,750 |
| Spun . . . | — | — |

The total receipts from railroads in Prussia amounted, in 1862, to 38,686,841 thalers, there being 746 m. of railway.

Shipping.—Considering the extent of sea-coast possessed by Prussia, and the facilities she enjoys for ship-building, the shipping is not very considerable. The mercantile navy of Prussia consisted, in 1863, of 1,783 vessels, of 415,371 tons burthen. Of this number, 89 were steamers, of 12,500 tons. The increase in tonnage amounted to 25.4 per cent. during the last ten years. Of vessels which arrived and left Prussian ports in 1859 there were 18,313, of 2,886,124 tons; showing an increase, in ten years, of 38.7 per cent. in the commercial activity of the kingdom.

The number of vessels of all nations which arrived at Prussian ports in 1862 was 11,963, including 1,344 steamers; the total burthen was 1,004,908 lasts. Of this number, 3,254, or more than half the total tonnage, bore the British flag. Vessels from Denmark numbered 2,759; those of Norway, 619; of Sweden, 400; of Russia, 237; of Spain, 47; of France, 100; and of North America, 2. As compared with the former year, the returns show an increase in the year 1862 of 588 vessels.

Money, Weights and Measures.—Accounts are kept in rix-dollars, or thalers, of 30 silver groschen. Each rix-dollar should contain 257.68 gr. fine silver, and is worth 2s. 11½d., but is generally taken at 3s. The centner, or quintal of 110 lbs., is equal to 113.381 lbs. avoirdupois. The last, by which ships' tonnage and freights are estimated

contains 4,000 Prussian lbs. One Prussian mile is equivalent to 4.68 English miles. The morgen is equal to 1.52 imp. acres.

Government.—Previously to 1823, the government of Prussia was an absolute monarchy. The succession was hereditary in the direct male line; and the prerogative of the prince, which was nearly despotic in theory, was only limited by the privileges of the different ranks and orders of the people, and still more by their intelligence and the power resulting from their military organisation. During the war which terminated in the liberation of the country from the domination of the French, the king promised to grant, on the expulsion of the invaders, liberal institutions to his subjects. But the performance of these promises was delayed, on one pretence and another, till 1823, and was then very imperfectly fulfilled by the institution of provincial states, whose powers were exceedingly circumscribed, and who, also, deliberated in private. An institution of this sort, far from satisfying the reasonable demands and wishes of the people, served only to give them more force. It was expected that on his accession to the throne, the next king, Frederick William IV., would have made some important constitutional concessions; and this expectation not being realised, petitions for an extension of popular privileges were presented from some powerful bodies; so that a change to more liberal institutions could not be postponed much longer. Consequently, in February, 1847, an ordinance appeared, by which his Prussian Majesty constituted the separate provincial states into a general diet or parliament, vested with very considerable powers. It is probable, but for the events that occurred in France in the course of 1848, that the form of government established by the ordinance of 1847 would have been gradually consolidated and modified, so as to suit the wants and habits of the people. But the influence of the occurrences in Paris stopped the course of this reform, and gave a stimulus to more democratic principles and projects which the government wanted the power to control. In consequence, a new constitution was drawn up, and having been promulgated at Berlin on the 1st of February, 1850, was sworn to by the king on the 6th of the same month. This constitution, altered considerably, in a conservative sense, by royal decrees of April 30, 1851; May 21 and June 5, 1852; May 7 and May 24, 1853; June 10 and October 12, 1854; May 30, 1855; and May 15, 1857, vests the legislative power in the king and two representative assemblies. The first of these, which may be called a senate or upper house, is composed of, first, the princes of the royal family who are of age, including the scions of the former sovereign families of Hohenzollern-Hechingen and Hohenzollern-Sigmaringen; secondly, the chiefs of the mediatised princely houses, recognised by the Congress of Vienna, to the number of sixteen in Prussia; thirdly, the heads of the territorial nobility formed by the king, and numbering some fifty members; fourthly, a number of life peers, chosen by the king among the class of rich landowners, great manufacturers, and 'national celebrities'; fifthly, eight titled noblemen elected in the eight provinces of Prussia by the resident landowners of all degrees; sixthly, the representatives of the universities, the heads of 'chapters,' and the burgomasters of towns with above fifty thousand inhabitants; and, seventhly, an unlimited number of members nominated by the king for life, or for a more or less limited period.

The other, or lower chamber, corresponding to the British H. of C., consists of 350 mems., who

are 'chosen by electors in electoral districts.' The electors in these districts are themselves chosen by universal suffrage, that is, by the votes of all male Prussians paying taxes and 24 years of age. But to modify the effect of the principle, the primitive electors are divided into three classes, determined by the amount of the taxes they pay; and these 3 classes of primitive electors, though their numbers be widely different, choose each a third part of the electors who directly elect the representatives. In consequence of this contrivance, the influence of the higher class of voters, or of those who pay the greatest amount of taxes, is not overborne by the mere numerical ascendancy of the other classes, and the chances are, that the representative body will be rendered more conservative than it otherwise would have been. The chambers are to be annually convoked in the month of November, the duration of the first being limited to six, and that of the second to three years. But this law, like the constitution itself, has frequently been set at naught in late years. Since 1862, popular representation in Prussia has been entirely powerless to counteract the will of the executive government, which has made laws and even decreed budget estimates without the concurrence of the chambers.

A president, with powers similar to those of a French *préfet*, and a salary of 6,000 rix-dollars (900*l.*), is placed at the head of each of the nine provs. into which the kingdom is divided. Each prov. has also a military commandant, a superior court of justice, a prov. director of taxes, a prov. consistory, all appointed by the king. The last is divided into three sections—one having the superintendence of schools, another of ecclesiastical affairs, and another of the public health. The provs. are subdivided into regencies or counties, and these again into *kreise*, or circles (*arrondissements*), and the latter into *gemeinden*, or parcs (communes). Each regency has a president and an administrative board or council, and the farther subdivisions have also their local authorities. The municipal organisation of the towns is more complicated than that of the communes. The principal functionaries are all elective, but the elections must be confirmed by the king or the authorities.

The system of law principally in force in the E. states of the Prussian monarchy is embodied in the well-digested code entitled *Landrecht für die Preussischen Staaten*, which received the royal sanction in 1791, and became law in 1794; but it is occasionally modified by custom, and Polish, Swedish, and German laws are still in force in certain parts of the monarchy. The Rhenish provinces follow, with some exceptions, the rules laid down in the *Code Napoleon*. The primary proceedings in judicial matters take place before local courts established in the circles and towns; thence they may be carried before the provincial courts (*Oberlandesgerichte*); and in the last resort before the supreme tribunals at Berlin. The judges are independent, and justice is purely and cheaply administered. Juries are employed in the Rhenish provinces, but not in the other parts of the monarchy. Tribunals of arbitration have also been established in the provinces of Brandenburg, Pomerania, Prussia, Silesia, and Saxony, similar to those established in Denmark, and with the same beneficial results. In no other country, perhaps, is patronage of so little consequence, and merit so sure to lead to distinction and advancement. Candidates for public employment go through a course of education appropriate to the functions they are desirous to fill; and, before being appointed, have to submit to

a severe examination as to their knowledge, conduct, and fitness for the office.

Religion.—The royal family belongs to the reformed or Protestant religion; but all denominations of Christians enjoy the same privileges, and are equally eligible to places of trust or emolument. In 1861, the pop. consisted in round numbers, of 10,500,000 Protestants, 6,000,000 Catholics, and 230,000 Jews. The Protestants predominate very decidedly in Brandenburg, Pomerania, Saxony, and Ducal Prussia; while the Catholics predominate in the Rhine province and Westphalia, in the regency of Oppeln, in Silesia, and in Posen. When Silesia was acquired by Prussia, the mass of the pop. were Catholics; but at present the Protestants predominate in the regencies of Breslau and Liegnitz, particularly the last.

The Protestant church is governed by *consistories*, or boards appointed by government, one for each province. There are also synods in most circles and provinces, but no general synod has yet been held. The constitution of the Catholic church differs in different provinces. In the Rhenish provinces it is fixed by the concordat, entered into between the French government and Pope Pius VII. But in every part of the monarchy, the crown has wisely reserved to itself a control over the election of bishops and priests. The incomes of the clergy are very small. The higher Catholic clergy are paid by the state, the archbishop of Breslau receiving 1,700*l.* a year, and the other bishops about 1,135*l.* The incomes of the parochial clergy, of both sects, mostly arise from peculiar endowments. Generally government does not guarantee the stipend either of Protestant or Catholic clergymen; but in many parts the clergy enjoy a public provision from the state. This is peculiarly the case in the Rhenish provinces, in virtue of the concordat already alluded to. Proselytism, or the attempting to induce a person to change his religion, whether by force or by persuasion, is prohibited by law; and all controversial sermons, or peculiar displays of religious zeal, would certainly attract the notice, and incur the displeasure, of the authorities. Except in the Rhine province and Westphalia, the population of which are bigoted Catholics, there is in no country less of religious acrimony and contention than in Prussia.

Education.—Prussia can boast of possessing a more perfectly organised and complete system of national education than has ever existed in any country. Frederick the Great has the merit of having introduced the system into Silesia, after he had wrested it from Austria. From Silesia the system has been gradually extended to the other provinces, and is now in full vigour in every part of the monarchy. Attendance at school is enforced by law. Every child, whether male or female, rich or poor, must attend a public school from the age of five years complete, till such time as the clergyman of the par. affirms that the child has acquired all the education prescribed by law for an individual in its station: generally speaking, the school time extends from 6 to 14 years complete. Should a child not attend, its parents or guardians must satisfy the public authorities that it is receiving an appropriate education at home, or in a private seminary. The school fees are exceedingly moderate, and the children of such poor persons as are unable to pay them, are instructed gratuitously at the public expense. It is officially reported that every child born in the kingdom, and remaining within its limits, receives an education. On the whole, Prussian education is of a superior quality, though it

involves too much of sameness and of military regime. The late king of Prussia devoted himself with much perseverance and discretion in maturing this system. Nothing has been omitted that could render it perfect. In the schools for the instruction of the masters, the examinations exercised over every part, the utmost anxiety is evinced to render it as perfect as possible. No particular religious creed is allowed to be taught in any school; but on particular days, set apart for the purpose, the children are instructed by the clergymen of the different sects to which they belong. Their religious instruction is not, therefore, neglected; while the intermixture of the different sects from their earliest years, on a perfect footing of equality, removes all asperities and religious animosities. All matters relative to the public schools are managed in each province by a public board appointed for that purpose, and the expense is defrayed by government.

Exclusive of the gymnasiums and superior schools, Prussia has 6 universities, those of Berlin, Breslau, Bonn, Halle, Königsberg, and Greifswald; and the two semi-universities of Münster and Braunsberg. These are placed directly under the control of the minister of public instruction, and much pains have been taken to render them efficient and useful. The number of professors and subordinate teachers in the universities is very great, and we should incline to think that they have been needlessly multiplied. The university of Berlin is best attended, and next to it those of Breslau and Bonn.

Military Force.—The situation of Prussia, surrounded by powerful states, and with a disjointed territory, requires for her security a large military force. But as the revenue of the country is comparatively limited, it became indispensable to endeavour to organise the army, so that it might embrace the maximum of force with the minimum of expense. The Prussian government seems to have very satisfactorily solved this important and difficult problem. The obligation of military service is universal; every man (no substitutes being accepted) is obliged to serve in the army of the line and the *landwehr* (provincial army), between the ages of 20 and 38. Every Prussian subject is enrolled as a soldier as soon as he has completed his 20th year. He has to be in the army during 7 years, 3 years of which must be passed in the regular army, and the rest among the troops of the reserve. At the end of this term the soldier enters the *landwehr*, or militia, for 9 years, with liability to be called upon for annual practice, and to be incorporated in the regular army in time of war. Leaving the *landwehr*, the soldier is finally enrolled in the *landsturm*. The *landsturm*, or *levy en masse*, consists of all the men not in the army or the *landwehr* up to the age of 50, and of young men between 17 and 20. This force is only called out in case of invasion. There are various exemptions from this law of military service, in favour of the nobility, clergy, and some other classes of the population. A certain amount of education and fortune constitutes also a partial exemption, inasmuch as young men of 20, who pay for their own equipment, and can pass a light examination, have to serve only one year in the regular army. This does not exempt them, however, from the legal service in the reserve, the *landwehr*, and the *landsturm*.

The staff of the regular army consists of one general field-marshal, one general feldzeugmeister, 31 generals, 36 lieut.-generals, 69 major-generals, 77 colonels of infantry, 18 colonels of cavalry, 15 colonels of artillery, 6 colonels of engineer corps,

and one colonel of trains. The organisation of the army is as follows:—

| | Number of Men on Peace-footing | Number of Men on War-footing |
|---|--------------------------------|------------------------------|
| Field Troops— | | |
| Guard-infantry, 9 Regiments | 16,991 | 27,054 |
| Line-cavalry, 72 | 116,208 | 216,432 |
| Chasseurs and Rifles, 10 Battalions | 5,340 | 10,020 |
| Total of Infantry | 138,539 | 253,506 |
| Guard-cavalry, 11 Regiments | 4,813 | 4,813 |
| Line-cavalry, 40 | 24,000 | 24,000 |
| Landwehr-cavalry, 12 „ | 216 | 7,200 |
| Total of Cavalry | 29,049 | 36,013 |
| Artillery— | | |
| 9 Brigades | 18,194 | 42,502 |
| (Guns | 432 | 864 |
| Pioneers, 9 Battalions | 5,400 | 9,018 |
| Train, 9 Battalions | 2,097 | 29,034 |
| Total Field-troops | 193,259 | 370,073 |
| Garrison troops— | | |
| Infantry, 36 Regiments | 1,972 | 116,232 |
| Cavalry | — | 800 |
| Artillery | 4,995 | 16,200 |
| Pioneers | 350 | 1,950 |
| Total | 7,317 | 135,182 |
| Total strength of the Regular Army | 208,576 | 609,669 |

The formation of a navy for the kingdom dates from the year 1848. According to a return made by the government in August, 1863, the fleet of war at that period consisted of the following vessels:—

| Sailing Vessels | Guns |
|---|------------|
| 3 Frigates of 48, 38, and 28 guns | 114 |
| 3 Brigs, one of 6, and two of 16 guns | 38 |
| 1 Transport, with | 6 |
| Total 7 Sailing Men-of-war, with | 158 |
| Steamers | Guns |
| 6 Screw Corvettes of 26 and 28 guns | 162 |
| 2 Paddle-wheel Steamers, with | 16 |
| 22 Gun-boats, of two and three guns | 62 |
| Total 30 Men-of-war Steamers, with | 240 |
| Altogether, 87 vessels, with 398 guns. | |

Revenue and Expenditure.—The revenue and expenditure of the kingdom, from the establishment of the parliamentary system till 1861, have been as follows:—

| Years | Revenue | Expenditure | Deficit |
|-------|-------------|-------------|-----------|
| | Thalers | Thalers | Thalers |
| 1849 | 85,993,281 | 91,601,281 | 5,608,000 |
| 1850 | 88,765,349 | 93,326,567 | 4,561,168 |
| 1851 | 90,721,860 | 93,791,433 | 3,072,573 |
| 1852 | 94,277,300 | 96,911,013 | 2,633,713 |
| 1853 | 97,558,698 | 101,159,163 | 3,600,895 |
| 1854 | 103,925,069 | 107,990,069 | 4,065,000 |
| 1855 | 105,953,312 | 109,835,632 | 3,882,320 |
| 1856 | 113,064,113 | 116,336,877 | 3,272,764 |
| 1857 | 120,242,312 | 120,242,312 | — |
| 1858 | 126,409,778 | 126,409,778 | — |
| 1859 | 140,399,288 | 131,859,288 | 1,460,000 |
| 1860 | 130,312,755 | 136,342,516 | 6,029,561 |
| 1861 | 134,541,701 | 139,327,337 | 6,239,358 |

Altogether, the revenue of Prussia increased 63 per cent., and the expenditure 65 per cent., from the year 1849 till 1863, with a total deficit of 42,971,640 thalers, or 6,138,806*l.*, during a period

of 13 years. In the financial estimates laid before the chambers every session, the income and expenditure were nearly always calculated to be equal; but the 'extraordinary expenditure,' admitted afterwards, occasioned a more or less considerable deficit.

The public debt of the kingdom, according to the official report laid before the house of deputies in the session of 1862, was as follows, on January 1, 1862:—

| | |
|---|--------------------|
| 1. National Debt bearing Interest:— | Thalers |
| Consolidated Debt of May 2, 1842 (Staatschuldscheine) | 82,722,200 |
| Voluntary Loan of the Year 1848 | 5,074,670 |
| Loan of 1850 | 14,447,900 |
| „ of 1852 | 14,002,300 |
| „ of 1853 | 4,504,000 |
| „ of 1854 | 13,761,800 |
| Preference Loan of 1855 | 13,560,000 |
| Railway „ of 1855 | 7,267,300 |
| Loan of 1856 | 15,917,800 |
| „ of 1857 | 7,680,000 |
| First Loan of 1859, at 5 per cent. | 30,000,000 |
| Second Loan of 1859 | 18,400,000 |
| Deposited Securities | 5,600,000 |
| Debt to Army-widows-fund | 890,400 |
| Total National Debt, bearing Interest | 234,828,370 |
| | £33,546,910 |
| 2. National Debt, not bearing Interest:— | Thalers |
| Bank Notes, called 'Massen-Anweisungen' | 15,842,347 |
| | £2,268,192 |
| 3. Provincial and Railway Debt:— | Thalers |
| Provincial Loans | 4,316,623 |
| Loans for State Railways | 19,355,025 |
| Total of Provincial and Railway Debt | 21,671,648 |
| | £3,095,949 |
| Total Public Debt of the Kingdom | 274,342,365 |
| | £39,191,795 |

The national debt of Prussia dates from the reign of Frederick William II. King Frederick II., called 'the Great,' left at his death a treasure of 72,000,000 thalers, which not only was spent during the 11 years' reign of his successor, but a debt incurred of 50,000,000. King Frederick William III. at first succeeded in reducing this debt to less than 30,000,000; but the subsequent wars with Napoleon I. again increased the national liabilities. The debt amounted to 53,494,914 thalers, or 7,642,130*l.*, in the year 1805, and had risen to 217,975,517 thalers, or 31,139,359*l.*, in 1813. The French government had to pay 145,000,000 of francs to Prussia for war expenses, according to the stipulations of the treaty of Paris, and by these means, and subsequent large reductions in the expenditure, the national liabilities were reduced to 82,722,200 thalers, or 11,817,457*l.*, which sum was formed into a consolidated debt by the law of May 2, 1842. The further progress of the debt is seen in the above table.

Food, Dress, Diversions, and Habits of the Bulk of the People.—The food, dress, diversions, and habits of the people are very different in different provs. In general, rye is the ordinary bread-corn. About half a century since the consumption was estimated at from 5 to 6 scheffel per head, but now it is not more than 3 scheffel, the defect being made up by the increased consumption of potatoes. In many districts, indeed, potatoes are now almost the only vegetable food. Besides rye-bread and potatoes, the people use barley, buck-wheat, and milk. In the Rhenish provs. wheat is more extensively used than in the other provs. The wheat cultivated in Prussia Proper and Posen is rather for sale than for inland consumption. Beans and pease are extensively used in most parts of the monarchy. Coffee, mixed with chicory, is exten-

sively used, and on Sundays it is taken by all classes. The consumption of sugar has rapidly increased, and amounts, at an average, to about 4 lbs. per individual, notwithstanding the substitution of honey for sugar in very extensive districts. The consumption of butchers' meat is considerable, principally in towns. It is estimated over the whole monarchy at from 36 to 37 lbs. a year to each individual. But in the towns it may be from 40 to 50 lbs., and in the country perhaps not more than from 20 to 30 lbs. In Berlin the consumption of butchers' meat exceeds 100 lbs. per individual; and this, in all cases, is exclusive of poultry, fish, and game. Game, indeed, is only used by the richer families; but fish is an ordinary food of the peasantry in many districts. Poultry, especially geese, are largely used by the common people in Pomerania. There is also no want of butter for the peasantry, but the consumption of cheese is greater. The consumption of spirits is immense; it is less, however, in the Rhenish provs., where wine is extensively used, than in other parts of the monarchy. Beer also is an ordinary beverage, and the consumption is very great. The consumption of tobacco is estimated at 3½ lbs. per individual.

The general dress of the men consists, in winter, of a woollen great coat, and in summer a linen coat. Women now begin to be extensive consumers of cotton stuffs; it is still, however, customary for the young female peasants to prepare stocks of linen in anticipation of their marriage. Wooden shoes are worn, but are not so frequent as in France or Ireland, and in bad weather almost every body is well shod with leather boots and shoes; but in fine weather a few of the common people go barefoot. Silks are only used by the wealthier classes.

It is usual for the peasants to go to church regularly on the Sunday forenoon; and it is customary for them to spend the evening of the day in diversions of some sort or other, frequently in the alehouse, and in Silesia in dancing parties. Most little towns have shooting places, and the meetings of the landwehr for exercise are looked forward to with much satisfaction.

PRUSSIA (PROPER), an extensive and important prov. of the Prussian dominions, divided into the provinces of East or Ducal Prussia, and W. Prussia, having N. the Baltic, E. and S. Russia, Poland, and the prov. of Posen, and W. Brandenburg and Pomerania. Area, 24,880 sq. m. Pop. 2,868,522 in 1861. The prov. is divided into 4 regencies and 57 circles. Principal towns, Königsberg, Dantzic, Elbing, Tilsit, and Marienwerder. It consists principally of an immense plain, traversed by the Vistula, Pregel, Passarge, and other rivers, and interspersed with numerous lakes and immense forests. Soil various, but generally fertile, particularly the delta of the Vistula and the country watered by the Niemen. Principal products, wheat and other sorts of corn, timber, hemp, and flax, provisions, wool, and ashes. Rye is more cultivated than any other sort of grain; wheat is also largely cultivated, but more for exportation than for internal consumption; rye being the ordinary bread corn. Oats, barley, and peas are also raised, and latterly potatoes have been extensively cultivated. Farming implements defective and ill constructed; the harrows are made of wood, without any iron, even for teeth. With the exception of the crown estates, which are let on lease, but little land is rented. In the circles of Dantzic, Elbing, and Marienwerder, good land fetches, when let, from about 4s. 6d. to 5s. an acre, the tenant bearing all taxes. But in other districts the rent of the cultivated land does not exceed from 1s. 3d. to 2s. 6d. an acre. The wages of farm

labour vary in summer from 4d. to 8d., and in winter from 3d. to 5d., without food; but with a cottage free, or at a low rent, a garden, and pasture for a cow. In harvest the wages are a good deal higher. The peasantry live in wooden or clay cottages, with but few luxuries, principally on potatoes, rye bread, and milk, rarely tasting animal food, but drinking great quantities of spirits and beer. Linen, from flax of their own growth, and wool spun in their cottages, furnish their clothing. Domestic servants get butchers' meat, generally pork, once or twice a week. Wood and turf are almost everywhere abundant, and are the principal articles of fuel. Amber is found along the sea-shore, but otherwise minerals are quite unimportant. There are many distilleries and breweries, but, with the exception of Posen, this is the least manufacturing prov. in Prussia.

PSKOF, a government of European Russia, chiefly between the 56th and 58th degs. N. lat. and the 28th and 32d E. long., having N. Petersburg and Novgorod, of each of which govts. it formerly made a part; E. Tver and Smolensk; S. Wittepsk, and W. Livonia. Area estimated at 22,154 sq. m. Pop. 706,462 in 1858. The surface is nearly flat, with a slope to the N., the direction taken by most of the rivers. None of these are of considerable size; but the gov. is, notwithstanding, well watered. At the NW. extremity is the lake of Pskof, connected by a strait with that of Peipus. Marshes are numerous. The atmosphere is usually damp, though, on the whole, the climate is far from unhealthy. Soil thin, and not very fertile, but more corn is grown than is required for home consumption. A good deal of hemp and flax is raised. The forests are extensive, and abound with game. Cattle are not of great importance, and bees are less reared than in most provinces. Manufactures have increased during the present century, but they are still of no great consequence. Pskof is divided into 8 districts; chief towns, Pskof, the cap., Toropetz, and Velikie-Louki. Its pop. consists mainly of Russians, with some Lithuanians and Finns. Public education is little extended.

PSKOF, or PLESKOW, a town of European Russia, cap. of the above gov., on the Velikaia, 165 m. SW. Petersburg. Pop. 15,936 in 1858. The town is mostly built of wood, but has two good edifices belonging to the archbishop and the consistory; a number of churches, two convents, and a high school. Its only manufactures are of leather, but it has a considerable trade in the export of the products of the country. A large annual fair is held here in Feb., at which large quantities of woollen, silk, and cotton fabrics, leather, books, and jewellery, are sold.

PUEBLA (LA), a city of Mexico, cap. of the prov. of its own name, on the declivity of a hill, 76 m. ESE. Mexico, and 125 m. W. by S. Vera Cruz. Pop. estim. at 72,000 in 1863. The city is compactly and uniformly built. The streets, which, though not very wide, are straight, and intersect each other at right angles, are paved with large diamond-shaped stones, with broad and well kept footpaths on either side. The houses, of stone, are generally two stories high, with flat roofs, having mostly a court in their centre, surrounded with open galleries, and a fountain of fine water, conveyed thither by earthen pipes. Many have iron balconies toward the street, and their fronts are inlaid with highly glazed tiles, or else gaudily and fantastically painted. The apartments are spacious; they are mostly paved with porcelain, carpets not being in use; and their walls are adorned with paintings in fresco. The family of the proprietor usually resides in the upper

story, the ground-floor being occupied with shops, warehouses, or offices, and the second story by servants.

The cathedral, which forms one side of the principal square, has nothing remarkable in its exterior, but its interior is very rich. The high altar, which, however, is too large for the building, is particularly splendid. Several of the other churches are handsome, and, like the cathedral, abound in gold and silver ornaments, paintings, and statues. The bishop's palace has a library 200 ft. in length, which has a tolerable collection of Spanish and French books. Many of the inhabitants are wealthy, and have handsome carriages drawn by mules; but, like Mexico, the city swarms with beggars, a consequence of the want of industry, occasioned partly and principally by the mildness of the climate, but partly, also, by the distribution of provisions at the convent doors. It was formerly famous for its manufactures of coarse woollens, cottons, glass, earthenware, and soap; but most of these have declined with the decrease of the trade formerly carried on with Acapulco, Callao, and the other ports on the Pacific. The manufactures of glass and earthenware, however, keep up their reputation, and the soap made here is sent to most parts of Mexico.

La Puebla was founded by the Spaniards. The prov. of which it is the cap. comprises the town of Cholula, Tlascala, Huexotzingo, and other anc. Mexican cities: it also includes Popocatepetl, 17,716 ft. above the sea, being the highest mountain in N. America.

PUERTA DE STA MARIA. See **ST. MARY'S**.

PUERTO-REAL, a town of Spain in Andalusia, prov. Cadiz, and on the bay of that name, 5 m. E. Cadiz, and 60 m. SSW. Seville, on the railway from Cadiz to Seville. Pop. 6,544 in 1857. The town is tolerably well built, with straight, regularly formed streets, crossing each other mostly at right angles, and lined with good houses. The only public buildings are a parish church and 2 hospitals. Fronting the sea is a wharf rising about 1½ yard above the level of the highest tides; and a mole, 50 yards broad, runs out 300 yards to low-water mark, having steps on each side for embarkation at all times of the tide; the whole is of stone, and has a handsome appearance. Near the town are extensive salt works. The process of manufacture is by evaporation in wide and deep basins, communicating with the sea by locks.

PUNJAB (THE) (country of the *Five Rivers*), or **LAHORE**, a British territory of NW. Hindostan, between the 28th and 35th degs. N., and the 70th and 78th degs. E. long., comprising the country between the Indus on the NW., the Himalaya mountains on the NE., and the Sutledge on the S. It is of a triangular shape, its apex being at the SW. extremity. It has on its NW. frontier the Caubul territories, NE. Thibet and Ladakh, and SW. Hindostan. It derives its name from its being watered by the 5 great arms of the Indus, viz. the Jhylum, or Behul (an. *Hydaspes*); the Chenab (an. *Acesines*); the Ravee (an. *Hydraotes*), and the Sutledge (an. *Hysudrus*), with its tributary, the Beas (an. *Hyphasis*). Area estimated at 125,000 sq. m. Pop. probably 4,500,000, chiefly Sikhs, Jants, Rajpoots, Hindoos of low caste, and Mussulmen.

Nearly the whole country is flat: it is in many parts fertile, especially along the banks of the larger rivers; but it also comprises some wide, sandy, and barren tracts, especially between the Indus and Hydaspes. Cultivation generally increases and improves as we proceed eastward. Of the 4 divisions of the Punjab E. of the Hydaspes, the two nearest to that river are principally

depastured by herds of oxen and cattle; and that most to the E. is the best cultivated. Sir A. Burnes says, 'there is, perhaps, no inland country which possesses greater facilities for commerce than the Punjab, and there are few better supplied with the products of the mineral, vegetable, and animal kingdoms. These relieve it from any great dependence on external resources. The wheat and barley of the plains are expended within the country; and such is the number of horses, that gram, bajree, and other grains reared in a dry soil, are imported. Rice is exuberantly produced under the mountains; but it is not a diet which suits the palate of the people. The cane thrives luxuriantly, and sugar is manufactured for exportation. The smallness of its stalk is remarkable; but it is said to produce the most saccharine fluid, and is preferred to the thicker canes of India. Indigo is reared E. of Lahore, and exported to the Mohammedan countries westward. A valuable oil is extracted from the *strya*, or sesamum plant, and used both for the lamp and culinary purposes. Esculent vegetables, such as turnips and carrots, are produced everywhere; and most of the vines and fruit-trees common to Europe may be seen in the mountains. The climate is not very favourable to the cotton shrub; it is produced in the 'doab,' between the Sutledge and Beas rivers; but it is also imported from the dry country S. of the former river. The mineral resources of the Punjab have been very imperfectly explored. A range of hills, extending from the Indus to the Hydaspes, formed entirely of rock-salt, furnishes an inexhaustible supply, and, being a close monopoly, contributes to enrich the ruler. It is in general use throughout the country, and most extensively exported, till it meets the salt of the Sambre lake in Rajpootana and the Company's territories. There is another deposit of salt on the verge of the mountains towards Mundi, but of an inferior description. In the same vicinity, it is said, some mines of coal have been discovered; and there are also extensive mines of iron. The salt range, and the other high lands, yield alum and sulphur; and nitre is gathered in large quantities from the plains.' (Bokhara, &c., iii. 316-322.) The climate in the N., though hot in summer, is as cold in winter as that of France and Central Europe, and is never sufficiently warm to mature the most valuable products of Hindostan. Rice is grown in the valleys, but in limited quantities, the usual food of the pop. being wheat or peas, made into a thick soup; and, according to Sir C. Trevelyan (Parl. Rep. on India, 1840), the Punjab does not produce sufficient sugar for its own consumption, but imports it from other parts of India. Mr. Elphinstone, who travelled both in the N. and S. parts of this country, states that not one-third part of the surface seen by him was under tillage; and there can be no doubt of the correctness of his statement, that, except near the rivers, no part of the Punjab will bear a comparison for productiveness with Hindostan. (Elphinstone's Caubul, i. 109.)

The plains, which are intersected by so many rivers, might be successfully irrigated by canals; as is proved by the existence of some, and the remains of many others, the work of the Mogul emperors. The country abounds in cattle and horses, but the former are small and ill-conditioned, and no attention is paid to the breed of either. The salt mines, which were opened at a very early date, are one of the most productive sources of revenue. Burnes states that they formerly yielded about 800,000 maunds a year. The salt was sold at 2 rupees the maund, or at a third part of the price of that of Bengal; but the profit to the govern-

ment amounted notwithstanding to 1,100 per cent. (Burnes.) The remainder of the public revenue, which amounted to about 2½ crores rup., was principally derived from exorbitant taxes on land and agricultural stock. Moorcroft mentions a peculiar method of assessing the land-tax, adopted, in his time, between the Beas and Sutledge, by a collector who had been chief financial minister to Runjeet Singh. 'A given quantity of earth was put into a fine muslin sieve, and washed with water until all the mould was carried through, and nothing but the sand left, and, according to its proportion to the whole, a deduction was made from the assessment. Four rupees for 2 begas was the fixed rate for the rich soil; 3 if it contained one-fourth of sand; 2 if it had a half; and 1 where the sand was three-fourths the quantity. The general character of the soil of the Punjab, composed chiefly of mould and sand, renders this mode of appreciating its assessment more correct than might be supposed; and it was, at any rate, preferable to the old plan of assessing the land according to the estimated out-turn of the standing crops.' (Moorcroft's Travels in the Himalayas, i. 121.)

As respects the commerce of the Punjab, the staple commodities are the shawls of Cashmere, which reach India and Europe wholly through this channel. The annual revenue from the shawl manufacture, exclusive of every expense, is rated at 18 lacs of rupees, though, from frauds of all kinds, this sum greatly exceeds the amount that actually reaches the treasury. It is a curious fact, that the silkworm is unknown in the Punjab, though the silks of the immediately adjacent state of Mooltan have a high reputation in India. The natives in the E. of the Punjab excel in the manufacture of cotton, and their looms furnish white cloth at from ¼ to 1 rupee a yard, which, though inferior in appearance to that of British manufacture, is stronger and more durable. There is a considerable demand for foreign copper, brass, tin, and lead; all kinds of British hardware and woollens are much prized. There is a considerable importation of European articles, and British chintzes have wholly superseded those of Mooltan.

The Punjab is interesting to the classical scholar, from its being the theatre of Alexander the Great's Indian victories. Mr. Elphinstone supposes the scene of the defeat of Porus to have been at Jelal-poor, on the Hydaspes, while, according to Burnes, it was most probably at Jelum, about 25 m. higher up the river. Burnes imagines he has discovered on the opposite sides of the Jhyum, about lat. 32° 40' N., long. 73° 40' E., the sites of Nicaa (victory town), built by Alexander at the point where he crossed the Hydaspes, and of Bucephalia, built in commemoration of his favourite horse, Bucephalus, which expired in this region. (Mitford, viii. 200.) Burnes joins Major Wilford in identifying the neighbourhood of the celebrated tope of Manikyala, between the Indus and the Hydaspes, with the site of the anc. Taxila. There are, however, very few Greek remains in the Punjab; and the statements of the historians of Alexander, as to the places where the great events in his Indian expedition occurred, are far too indistinct to allow of any certain conclusions being deduced from them. The Sikhs, now the ruling race in this quarter, originated as a Hindoo sect about the middle of the 15th century, and remained in a turbulent feudal condition till early in the present century. About that period, Runjeet Singh, having subdued the other Sikh chieftains, established a despotism; which, though far behind the governments of Europe, was yet far in advance of most native governments in the East. He maintained an army of about 25,000 regular infantry, drilled as Eu-

ropeans, 5,000 regular cavalry and artillery, and, perhaps, 50,000 irregular horsemen. His government was vigorous, without being either cruel or unnecessarily severe. After his death, which occurred in 1839, and the assassination of his son and successor, the country became a prey to anarchy. At length, in 1845, the several chiefs so far composed their differences, as to invade the British territories with a powerful and well-appointed army; but being defeated in a series of engagements, concluding with the battle of Sohraon, a treaty was concluded with them in 1846. They appear, however, to have entered into this treaty rather to gain time than with any other object, and, in 1848, they again attacked the British. On this, as on the former occasion, they displayed the greatest bravery, and the contest with them was most severe; but being completely defeated and dispersed in the battle of Goojerat, the country was finally occupied by British troops, and incorporated with the British territories, in 1849.

PUTIWL, or POUTIVL, a town of European Russia, gov. Kursk, cap. distr., on the Seim, a tributary of the Dniepr, 100 m. WSW. Kursk. Pop. 6,185 in 1858. The town has a good trade in agricultural produce.

PUTNEY, a par. and village of England, co. Surrey, on the Thames, 4 m. WSW. Hyde Park corner. Area of par. 2,880 acres; pop. 6,481 in 1861. The village, which is well-built, and has numerous houses, chiefly occupied by people who prosecute their business in London, is connected with Fulham, on the opposite bank of the river, by a bridge erected in 1729. The par. church, of an ancient date, was in great part rebuilt in the reign of Henry VII.: here, also, are places of worship for dissenters, an endowed school for the sons of water-men, and 2 national schools. Putney is connected with the metropolis by the London and South Western railway; and it has also intercourse with the city by means of steamers. A college has been established, in a fine situation on the banks of the Thames, a little to the E. of the village, for the education of civil engineers. The instruction in it is good; it is well attended.

The greatest of English historians, the illustrious author of the 'Decline and Fall of the Roman Empire,' first saw the light at Putney, on the 27th April, 1737.

PUY (LE), (an. *Reversio* and *Vellavi*), a town of France, dép. Haute-Loire, of which it is the cap., on the Borne, here crossed by a bridge of 8 arches, 36 m. SW. St. Etienne, on the railway from St. Etienne to Massiac. Pop. 17,015 in 1861. The town stands on a steep acclivity, and has, when seen from a distance, a picturesque appearance; but, in reality, it is ill-built, and the streets, which are narrow, dirty, and ill-paved with smooth pieces of lava, were formerly impracticable for vehicles of any kind, and even dangerous for foot-passengers. Lately, however, the thoroughfares have been made more practicable, and the town has been a good deal improved. The cathedral, in a very conspicuous situation, a Gothic structure of the 10th century, has a richly ornamented altar, on which is a statue of the Virgin brought by Louis IX. (St. Louis) from Egypt, and presented by him to the city in 1254, on his return from his unfortunate expedition to that country. Adjacent to this town is a very singular needle-shaped rock, about 300 ft. in height, on the summit of which another church is erected. Among the other public buildings are the prefecture, a handsome new edifice; a public library, with 5,000 vols.; town-hall, bishop's palace, seminary, college, hall of the tribunal of commerce, 2 hospitals, barracks, and theatre. Le Puy has a tribunal of original jurisdiction, a chamber of ma-

manufactures, a commercial college, normal school, a society of agriculture, science, and arts, gratuitous courses of geometry and mechanics, applied to the arts, and a small museum of antiquities and paintings. It is celebrated for its manufacture of white and black lace.

Le Puy is very ancient, but its origin is uncertain. It suffered considerably in the wars of the League; and, till lately, its trade and prosperity were much depressed.

PUY-DE-DÔME, ■ central dép. of France, formerly a part of Auvergne, between lat. $45^{\circ} 17'$ and $46^{\circ} 15' N.$, and long. $2^{\circ} 20'$ and $4^{\circ} E.$; having N. Allier, E. Loire, S. Haute-Loire and Cantal, and W. Corrèze and Creuse. Area, 795,051 hectares. Pop. 576,409 in 1861. This dép. is almost wholly covered with mountains of volcanic formation, the highest of which, the Pic-de-Sancy, is 6,223 ft. in height: the Puy-de-Dôme, whence the dép. takes its name, has an elevation of 4,842 feet. Principal rivers, Allier, Dore, Sionle, and Dordogne, most of which have a N. direction; the Allier intersects the dép. about its centre, and its valley, the Limagne of Auvergne, is exceedingly fertile. In general, however, the soil is sandy, stony, and otherwise indifferent; and agriculture, owing to the poverty and ignorance of the natives, is in a more backward state than in most other parts of France. Great numbers of the inhabs. annually emigrate in search of field labour into the adjacent provs. Rye, oats, and wheat are the principal grains cultivated. The annual produce of wine is estimated at from 400,000 to 500,000 hect.; it is mostly of inferior quality, cannot be conveyed from place to place without the risk of being spoiled, and, generally speaking, is good for little, unless it be mixed with other wines. The annual produce of wool is estimated at 900,000 kilogr. Chestnuts, timber, honey, walnut-oil, and cheese are among the principal sources of its wealth. Puy-de-Dôme yields lead, antimony, coal, and granite. Its manufactures, which are mostly confined to the arrond. of Thiers and Ambert, consist in the former principally of cutlery and hardware, paper, leather, and wax-lights; and in the latter of woollen, linen, and cotton goods, lace, and paper. The dép. is divided into 5 arronds., chief towns Clermont-Ferrand, Ambert, Issoire, Riom, and Thiers.

PYRENEES, a lofty chain of mountains in SW. Europe, separating Spain from France, and which, taken in its largest extent, may be regarded as stretching from Cape Creux, in Spain, on the Mediterranean, near the frontier of France, W. to the coast of Galicia, a distance of about 650 m. It is more usual, however, to confine the term to that portion of the chain which separates Spain from France:—

*Pyrene colsa nimborum verticis arce
Divisos Celtis late prospectat Iberos,
Atque æterna tenet magnis divortia terris.**

When thus restricted, the chain terminates on the W. near Fuenterrabia, between lat. $42^{\circ} 10'$ and $43^{\circ} 20' N.$, and long. $3^{\circ} 20' E.$ and $2^{\circ} W.$, its length being about 270 m., its average breadth about 38 m., and the area about 1,100 sq. m. This great range may be considered as consisting of 2 parts, both having the same direction, though not in one continued line, the point of division being formed by the Val d'Aran, near the head waters of the Garonne, of these the W. part is more southerly than that to the E. The steep escarpment is on the side of Spain; the slope towards France being much more gradual, owing to the elevation of the level districts about the Adour and Garonne. It may be remarked, also, that the

French valleys ascend the crest of the chain by easy steps, more or less lofty, while the opposite side presents a continued succession of rugged chasms, abrupt precipices, and huge masses of naked rock. The chain at each extremity declines towards the sea; but the fall on the E. is much more sudden than on the W.; the elevation only 50 m. from the Mediterranean being 8,500 ft., whereas, on the opposite side, this altitude is not found nearer than 70 m. from the coast. The following table gives the position and elevation of the principal summits of the Pyrenees:—

| | Lat. | Long. | Height in Feet |
|--|---------------------|--------------------|-------------------|
| Le Canigou . . . | $42^{\circ} 31' N.$ | $2^{\circ} 25' E.$ | 9,141 |
| Pic Pedrons . . . | $42^{\circ} 34' —$ | $1^{\circ} 56' —$ | 9,511 |
| Pic de Serrero . . . | $42^{\circ} 39' —$ | $1^{\circ} 20' —$ | 9,646 |
| Montcalm . . . | $42^{\circ} 41' —$ | $1^{\circ} 30' —$ | 10,663 |
| Pic des Estats . . . | $42^{\circ} 40' —$ | $1^{\circ} 28' —$ | 10,611 |
| Carabioules . . . | $42^{\circ} 42' —$ | $0^{\circ} 37' —$ | 10,545 |
| Troumouse . . . | $42^{\circ} 43' —$ | $0^{\circ} 13' —$ | 10,496 |
| * La Maladetta, or Pic de Néton . . . | $42^{\circ} 38' —$ | $0^{\circ} 47' —$ | 11,424 |
| * Pic Posets . . . | $42^{\circ} 40' —$ | $0^{\circ} 31' —$ | 11,277 |
| * Mont Perdu . . . | .. | .. | 11,168 |
| Pic de Cascade . . . | .. | .. | 10,745 |
| Do. Vignemale . . . | $42^{\circ} 46' —$ | $0^{\circ} 4' W.$ | 11,001 |
| Do. Soube . . . | $42^{\circ} 49' —$ | $0^{\circ} 21' —$ | 10,276 |
| Do. Midi de Bigorre | $42^{\circ} 55' —$ | $0^{\circ} 12' —$ | 9,544 |

The summits marked with an asterisk, which comprise the three highest points of the chain, are on its S. face. Glaciers are found, as in the Alps, on some of the higher mountains; but these masses of permanent ice are much less extensive, the point of perpetual congelation being at a height of 10,000 ft., or about 2,000 ft. higher than in the Alps, a difference owing chiefly to the vicinity of the sea on either side.

The valleys of the Pyrenees are numerous, and of singular conformation; for, whereas the depressions of the Alpine system run from 40 to 70 m. nearly in the direction of the chain, all the great valleys of the Pyrenees are transversal, taking their origin at a col in the crest, and running N. and S. almost at right angles with the main ridge. The largest valleys are found in the central Pyrenees, the principal being those of the Garonne and Lavedan, each of which is from 40 to 50 m. in length. These transverse valleys are commonly the beds of rivers, or rather torrents; which, in the wider and less elevated parts, take a slow and serpentine course, but in the defiles become rapid and impetuous torrents, often interrupted by cascades, and sometimes by a series of falls. Lakes are frequently enclosed in the basins formed in the higher ridges of the valleys, and several of those in the central Pyrenees, which are sheltered from the sun, are perpetually covered with ice. Some valleys, also, instead of running in a deep and narrow defile, or a series of little basins, more or less extensive, rising by degrees to the height of the central ridge, present at their origin a single basin, surrounded on three sides by a lofty wall of rock, and opening by a narrow gulley into the vale below; and these natural amphitheatres, or *cirques*, as they are termed (the principal of which is that of Gavarnia, in the valley of Barèges), constitute the grandest and most distinctive features of the Pyrenees. About 50 passes are formed through the valleys now noticed; but by far the greater number are practicable only for the peasantry, or used by smugglers, who are found in all parts of the Pyrenees. There are, besides the railway, only 5 good carriage roads over the chain:—

1. the Col de Pertus, the extreme E. pass between

Perpignan and Jonquera, practicable at all seasons, and by all kinds of vehicles; 2, the Pass of Puymoreins, leading from the valley of the Seine to that of the Ariège (6,299 ft. high); 3, the Port de Caufrane, between Pau and Saragossa (6,713 ft.); 4, the Port de Roncevaux, between St. Jean and Pampeluna (5,771 ft.); and, 5, the Pass of Bidassoa, along the high road connecting Burgos and Vittoria with Bayonne. The first and last of these passes were, previous to the opening, in 1865, of the railway skirting the pass of Bidassoa, most generally used by travellers between Spain and France. The two highest passes are the Port d'Or (9,843 ft.), and the Brèche de Roland (9,856 ft.).

The geology of the Pyrenees is still very imperfectly known. The extent of primitive rock is smaller than in the Alps; but its arrangement is very peculiar: not in isolated masses, bursting here and there through the transition and secondary formations, but in a band or zone running in the direction of the chain, but only occasionally falling in with the crest or central chain; the granite in the W. section is on the S., and in that to the E. on the N. side of the main ridge. The primitive formation is extremely simple, consisting of three rocks only, granite, micaceous schist, and primitive limestone, which, together, form a pretty continuous band, stretching three-fourths across the isthmus. The transition rocks, comprising the great bulk of the mountain system, are arranged in vertical bands flanking the primitive formation, and consist of argillaceous schist, schistose and common granwacké, with blue limestone: these strata occur mostly on the N. side, the beds S. of the primitive formation being chiefly secondary rocks, as red sandstone, Alpine and Jura limestone. The oolite and chalk formations are found in the lower parts of the chain on either side. The existence of volcanic action is proved by the trap and other similar formations, interspersed in different parts of the chain; by the peculiar manner in which many of the strata are upheaved; by the frequency of earthquakes on both sides of the range; and by the abundance of thermal springs, especially in the valleys on the French side of the Pyrenees. The most celebrated springs are those of Bagnères de Bigorre and Barrege, Bagnères de Luchon and St. Sauveur; all of which are visited, during the summer months, by persons labouring under rheumatism and chronic disorders, as well as by others in search of pleasure and picturesque scenery.

Iron, copper, zinc, and lead are found in the Pyrenees, but, with the exception of iron, these ores are not wrought, though it is a well known fact that great mineral riches were extracted from these mountains by the Carthaginians and Romans. Indeed, there are the remains of 300 or 400 deserted mines in different parts of the Pyrenees, some of which are said to be very rich. The veins of marble are numerous and valuable, one of them, a white marble, being equal, in purity and closeness of texture, to that of Carrara.

The flora of the Pyrenees comprise the rhododendra, the alpine rose, and a large variety of plants common to high elevations; the principal forest trees being the box, fir, pine, and, in lower situations, the deciduous oak. The fauna comprise the izzard, a species of chamois, the wolf, and the bear; with a variety of birds, many of which are migratory.

The Pyrenees give rise to numerous rivers. Those on the N. side comprise the Adour and its tributaries, the Pau, Oléron, Saison, Nive, &c.; the Garonne, with the Gers, Ariège, and others of its affluents, all sending their waters into the Bay of Biscay; and the Aude, the Tet, and the Tech,

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falling into the Mediterranean. The rivers descending from the S. slope are mostly tributaries of the Ebro, the principal being the Aragón, Gallego, Cinca, and Segre, all of which have numerous branches; the other rivers of this slope are the Ter and the Lobregat, the latter flowing into the sea close to Barcelona.

Scenes of savage sublimity are more frequently met with in Switzerland than in the Pyrenees; the N. lat. of the former, as well as the greater size of its rivers and lakes, adding to its features of wild grandeur. The Pyrenees, however, exceed the Alps in elevation, owing to the much lower level of the valleys, as compared with those of Switzerland, some of which are nearly 4,000 ft. high, while those of SW. France scarcely exceed 2,000 ft. The presence of oaks, also, in the forests, clothing the sides of the mountains, gives a beauty to the Pyrenees which is wholly absent on the fir-covered steep slopes of the Alps. But, however worthy of the traveller's notice, these valleys will probably never become the frequent resort of the tourist, because access to them is, notwithstanding the various lines constructed to and through these mountain masses, still very difficult, and the accommodation for travellers worse than indifferent; while Switzerland, accessible in all directions by good roads, and a complete network of railways, is visited not only on its own account, but because it is the high road to Italy.

The mountaineers of the Pyrenees are shepherds, and small proprietors both of land and cattle; but owing to the deficiency of nutritious vegetation, their condition as graziers is far inferior to that of their brothers of the Alps. They are patient and industrious, though seldom raised above want; besides which, they are in everything, but especially in food and clothing, more simple and primitive than the Alpine mountaineers, than whom, however, they are unquestionably handsomer and more vigorous. Their food usually consists of rye or barley, bread and paste, made from Indian corn, with, occasionally, salted kid's flesh and pork. Crime of every description is rare in the Pyrenees, theft very unfrequent, and murder altogether unknown. On these mountains is found the extraordinary race of people called *Cagots*, distinguished by their sallow and unhealthy countenances, stupid expression, want of vigour, relaxed appearance, imperfect articulation, disposition to goitres, and inferior share of mental capacity. They live in the most retired valleys, secluded from and studiously avoiding intercourse with the rest of the inhabs., by whom they are looked upon as a degraded race; and though they are not persecuted, enslaved, and debarred the privileges of religion as formerly, they are still a separate family, still outcasts; a people having evidently no kindred with those who live around them, but the remnant of a different and more ancient family. The origin of this curious race is hidden in obscurity.

The Pyrenees, which seem to have been known to the Greeks under the name of *Περσική*, are connected with many important historical events. Hannibal crossed them on his way to Italy, at the beginning of the second Punic war, most probably by the pass of Pertus, near the E. end of the chain. Julius Cæsar also traversed them with his army, when marching into Spain against Pompey. Charlemagne carried his victorious arms over these mountains, and added Spain to the empire of the Franks. Edward the Black Prince led his army over one of the western passes, when fighting in defence of Peter the Cruel against Henry of Trastamare; and these mountains have obtained a more recent celebrity

D

from having been the scene of several obstinate struggles between the French and English at the close of the Peninsular War, the result of which set in a striking point of view the great military talents of the Duke of Wellington.

PYRENEES (BASSES), a frontier *dép.* of France, reg. SW., formerly comprised in Gascony, Bearn, and Navarre; between lat. $42^{\circ} 47'$ and $43^{\circ} 35'$ N., long. 0° and $1^{\circ} 48'$ W., having N. Landes, E. Hautes-Pyrenees, S. and W. Spain, and NW. the Bay of Biscay, on which it has a coast-line of about 25 m. Area, 762,266 hect. Pop. 436,628 in 1861. The Pyrenees bound this *dép.* on the S.; their highest point in this part of the range, the Pic du Midi, being 9,546 ft. in height. Their ramifications cover the greater part of the *dép.*, which is traversed by the rivers Gave de Pau, Oleron, Bidouze, and Nieve, tributaries of the Adour, and flowing NW. Small lakes and mineral springs are very numerous. Except on the mountains, the climate is temperate and healthy: the soil in the lower parts of the country is very fertile, while the mountain sides are covered with fine pastures and forests, which maintain great numbers of cattle and hogs. Between Betharam and Pau the country is beautiful. Here are the rich vales of Bearn, every inch of land is cultivated, and the road is a constant succession of villages and houses. The principal products of this country are fruit, wine, and Indian corn, all of which grow in great perfection. It is in this district that the prunes so much prized in England are grown and prepared; and every description of fruit that is produced in the lower parts of Bearn is excellent of its kind. Here, too, is the vine, not as it is found in the other parts of France, an insignificant shrub, covering the acclivities, and possessing not much greater beauty than a potato-field; but trained from tree to tree, as in some parts of Italy and in the Tyrol. Agriculture is, however, in a very backward state; by what would seem to be a singular contradiction, the sides of the hills are cultivated, while the plains, which, it may be presumed, would be much more productive, are left waste or in pasture; and the corn is insufficient for the home supply. Maize and wheat are the grains principally cultivated; flax and hemp are also raised in large quantities. The produce of wine is estimated at about 800,000 hectolitres a year, of which about one-third part is consumed by the inhabs.; some growths, particularly those of Jurançon, near Pau, are of a superior quality. There are estimated to be nearly 117,000 head of cattle in the *dép.*, and 464,000 sheep, the produce of wool being supposed to amount to about 1,000,000 kilogr. The breed of horses has been greatly improved by the stud at Pau: a great many mules are bred for export into Spain. The hogs furnish the hams so well known under the name of *jambons de Bayonne*. Copper, iron, sulphur, cobalt, slate, marble, and granite are among the mineral products; and mining industry is carried on upon a pretty extensive scale. The manufactures comprise woollen and linen stuffs and yarn, printed handkerchiefs (called *mouchoirs de Bearn*), leather, hardware, earthenware, paper, chocolate, and brandy; and the *dép.* furnishes supplies of planks, with cordage, for the dockyard of Bayonne. The value of the cattle, wine, hams, and salted geese, exported to foreign countries, especially contraband to Spain, is estimated at 4,000,000 fr. a year, and that of the exports to other parts of France at about 3,000,000 fr. Basses-Pyrenees is divided into five arronds; chief towns, Pau, the cap., Bayonne, Maulcon, Oleron, and Orthez.

PYRENEES (HAUTES), a frontier *dép.* of

France, reg. SW., formerly included in Gascony, between lat. $42^{\circ} 42'$ and $43^{\circ} 35'$ N., and long. $20'$ W. and $35'$ E., having N. Gers, E. Haute-Garonne, W. Basses-Pyrenees, and S. Spain, the ridge of the Pyrenees forming the line of demarcation between the two kingdoms. Area, 452,945 hectares. Pop. 240,179 in 1861. Within the limits of this *dép.* are some of the most remarkable places of resort and objects of curiosity in the Pyrenees, as the baths of Barèges, Bagnères, and Cauterets, the valley of Gavarnie, and the *Brèche de Roland*. By far the greater part of the surface is covered with ramifications of the Pyrenees, among which the Gave de Pau, Gers, and Adour take their rise. Small lakes are very numerous in the mountains. There is a larger proportion of good soil in this than in the neighbouring *dép.* of the *Basses-Pyrenees*, though the produce of corn (chiefly maize and wheat), be still insufficient for the inhabs. Property is much subdivided; most of the peasants are proprietors of the soil they cultivate; and the greater number of the other proprietors are engaged in the cultivation of their own lands. A traveller, Mr. Inglis, describes a family in the mountains, whose condition might be taken as a fair sample of that of the poorer mountaineers of the Pyrenees. 'The property of the peasant,' he says, 'consisted of two cows and three goats. A small meadow in the neighbourhood of the hut was fertilised, and allotted to rye, and about a rood of land was laid out in potatoes and cabbages. The peasant and his family consumed the whole produce of the animals. Meat of no kind ever entered the cabin; but the lake, $1\frac{1}{2}$ league distant, occasionally supplied a few fish. A kind of cheese, like some of the poorer Scotch cheeses, was made from the goats' milk; and the sale of this to the lower orders at Cauterets was the only source of the money necessary for the purchase of clothes and whatever else was not produced by cows and goats.' (Switzerland, the Pyrenees, &c., p. 280, 281.) The *dép.* produces about 270,000 hectolitres a year of inferior wine, about a half of which is exported or converted into brandy. A good many cattle are reared, and the horses bred in the plain of Tarbes are extensively purchased for the service of the light cavalry. Mules are bred for export into Spain. The produce of wool is reckoned at about 870,000 kilogr. a year; and a good deal of butter is made of the milk of the sheep. The produce of honey and wax is also considerable. Minerals and manufactures, though of little importance, are not quite valueless, there being good marble quarries, and some fabrics of woollen, linen, and cotton stuffs, with tanneries and distilleries. The *dép.* is divided into three arronds; chief towns, Tarbes (the cap.), Argeles, and Bagnères de Bigorre.

PYRENEES-ORIENTALES, a maritime and frontier *dép.* of France, reg. S., consisting principally of the old prov. of Roussillon, with a portion of Languedoc, E., having N. Aude, W. Ariège, S. Spain, the ridge of the Pyrenees forming the line of demarcation between the two kingdoms, and E. the Mediterranean. Shape nearly triangular. Area, 412,211 hectares. Pop. 181,768 in 1861. The Pyrenees in this *dép.* are less lofty than in the greater part of the rest of their course; still, however, the Canigou, their highest peak, attains to an elevation of 9,140 ft. The *dép.*, though in great part mountainous, comprises a large extent of plain country. The principal rivers are the Tet, Tech, and Agly; but none of these are navigable. The arable lands are of two classes—wet and dry. The irrigable, or wet, are always under culture: in the rotation to which they are sub-

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jected, they usually yield three crops in two years, one of which is wheat, and the others trefoil, or beans, maize, potatoes, hemp, or flax, when they are kept in grass for an equal period. The dry, or non-irrigable, lands are alternately under wheat or rye, or in fallow. But though agriculture be better conducted than in most of the adjacent déps., the corn continues to be separated from the grain by treading out with horses, as in Aude. The total produce of corn, chiefly wheat, maize, and rye, is estimated at 442,160 hectolitres a year, a quantity obviously much below the demand of the pop. The dép. also furnishes in ordinary years about 300,000 hectol. of wine, and 12,000 of oil. The *vins ordinaires* are highly coloured and heavy, and are but little drunk in a pure state in other parts of France, but are extensively employed to give colour and body to the weaker wines of other déps. The red wines of Bagnols and the white wines of Rivesaltes are, however, of a very superior description. The white Muscat wine of Rivesaltes is said to be decidedly the best *vin de liqueur* produced in France. The horses of

the dép. have been very much improved by the imperial stud at Perpignan and otherwise: sheep and goats are, however, the most valuable domestic animals; the former yield annually about 50,000 kilogr. of wool for exportation, after supplying the home consumption. The mulberry has been introduced, but this dép. ranks *last* among those in which silk is grown. About 300,000 kilogrammes a year of cork are collected. Property is very much subdivided. Iron, copper, bismuth, and lead are raised, but in no great quantities. Many of the inhabs. of the coast are occupied in the tunny and anchovy fisheries; and there are manufactures of coarse woollen stuffs and hosiery, with iron forges, tanneries, paper mills, and distilleries. The dép. is divided into three arronds.: chief towns, Perpignan, the capital, Céret, and Prades.

Roussillon belonged successively to the kings of Majorca and of Aragon, till Louis XI. took it from the latter. It was restored by Charles VIII., and remained attached to the Spanish monarchy till 1640, when it was finally annexed to France.

Q.

QUEBEC, a city and sea-port of Canada, of which and of the British possessions in N. America, it is the cap., on the NW. bank of the St. Lawrence, at the point where it is joined by the St. Charles, about 340 m. from the mouth of the former. Pop. 62,188 in 1861. The city occupies the extremity of a ridge, terminating in the angle formed by the junction of the two rivers, in the point called Cape Diamond, rising to the height of nearly 340 ft. above the St. Lawrence. The cape is surmounted by the citadel; and the town extends from it, principally in a NE. direction, down to the water's edge. It is divided, from the difference of elevation, into the Upper and Lower towns. The old town, which lies wholly without the walls, partly at the foot of Cape Diamond, and round to the St. Charles, had narrow and dirty, and, in parts, steep streets, till the year 1845, when the principal part of it was destroyed in two tremendous conflagrations in May and June. Though built of stone, the houses which were burnt down were mostly roofed with shingles; and to this the extent of the destruction occasioned by the fires in question is principally to be ascribed. In rebuilding the town, care has been taken to have the streets properly laid out, widened, and otherwise improved. The ascent from the lower to the upper town is by a winding street and by flights of steps. The streets in the latter, though narrow, are generally clean, and tolerably well paved, or macadamised. The public buildings and most of the houses in it are roofed with tin plates.

Quebec is very strongly fortified, and may be called the Gibraltar of America. The citadel, over Cape Diamond, includes an area of about 40 acres, and is formidable alike from its position and its works, constructed on a gigantic scale, and on the most approved principles. The line of the fortifications, which stretches nearly across the peninsula on the W., and runs along a ridge between the upper and lower towns, is intersected by five gates, and has an inner circuit of about 2½ m. Beyond the ramparts, on the W., are the extensive suburbs of St. Roch, St. John, and St. Louis.

The public buildings are substantial rather than elegant. The Château St. Louis, the residence of the governor-general, a large plain building, on a

height overhanging the river, was burnt down early in 1835. The Roman Catholic cathedral of Notre Dame, the Protestant cathedral, with sundry other Catholic and Protestant churches; the old episcopal palace, now the seat of the Canadian legislature; the quadrangular edifice, formerly the college of the Jesuits, but now a barrack, in the upper town; with the Quebec bank, the exchange reading-room, and the government warehouses, in the lower town, comprise the principal public buildings. There are three nunneries, one of which, the Hôtel de Dieu, is a very valuable hospital. The nuns are here, in fact, a most useful class of persons, acting as nurses to the sick admitted within these establishments, and as instructresses of young girls.

Among the establishments for educational purposes, the first place is due to the French college. It has a principal, and professors of theology, rhetoric, and mathematics, with five regents for the Latin and Greek classes. Here is also a royal grammar school, a classical academy, a national school, and many French and English private schools. A royal institution for the advancement of learning within the prov., and a literary and historical society, respectively enjoy the patronage of the government and of the principal inhabs. A mechanics' institute was established in 1830; and it has numerous benevolent associations. The city public library, though not very extensive, is well selected, and contains a great variety of standard works. The garrison, also, has a good library.

Though not a manufacturing town, Quebec has various distilleries, breweries, with tobacco, soap, and candle works; and numbers of fine ships have been launched from its yards. It has two or three banks, and a savings' bank. The markets are well stocked with most sorts of produce, but good fish is rather scarce and dear.

The climate, though on the whole good and healthy, is in extremes. In summer the heat is equal to that of Naples, while the cold of winter is not inferior to that of Moscow. This inequality occasions a corresponding difference in the modes of life during the different seasons of the year. In winter travelling is carried on by means of sledges and carriages, in the same way as in

QUEBEC

Russia. The first view of Quebec in sailing up the St. Lawrence is striking in the extreme; and there is a magnificent prospect from the citadel on Cape Diamond. The majority of the pop. being of French extraction, the French language, which is still spoken in some of the best circles with great propriety, and the R. Catholic religion, predominate. Society is here more polished and refined than in any other town of British America; and the higher provincial gentry of French descent are distinguished by the courteousness and urbanity of their manner. But all classes are much given to show, and generally indulge in expenses beyond their means. Hence Quebec is very expensive; and owing to the jealousies that exist, and the violence of provincial politics, society is split into different parties. Great attention is, also, paid to etiquette; and those admitted to the governor-general's parties rarely associate with those who do not enjoy that honour.

Vessels of the very largest burden arrive at Quebec. Its harbour or basin, between the city and the island of New Orleans, is of great extent, having in general about 28 fathoms water, the tide rising from 16 to 18 ft. at neaps, and from 25 to 30 ft. at springs. Ships lie alongside the wharfs along the St. Lawrence. There are extensive flats between the lower town and the St. Charles, where wet docks might be easily constructed. The trade of the city is very extensive. It engrosses, with Montreal, almost the entire trade of the prov. with the mother country and the W. Indies. It has a regular intercourse, by means of steamers, with Montreal, and other ports higher up the St. Lawrence, and with Halifax and other ports on the Atlantic. The corn and flour exported from Quebec is not the growth of the prov., but of the U. States. The principal articles of import consist of corn, cottons, woollens, silk, and other manufactured goods; glass wares, spirits and wines, iron and hardware, sugar and tea.

During the year 1862, the following number of vessels with cargo entered the port.

| Countries whence arrived | British | | Foreign | |
|--------------------------|---------|---------|---------|--------|
| | Vessels | Tons | Vessels | Tons |
| United Kingdom | 365 | 265,290 | 8 | 4,452 |
| British Possessions: | | | | |
| Nova Scotia | 20 | 2,074 | — | — |
| New Brunswick | 26 | 1,919 | — | — |
| Newfoundland | 37 | 2,720 | — | — |
| Prince Edward Isl. | 3 | 251 | — | — |
| Gibraltar | — | — | 1 | 997 |
| Malta | — | — | — | — |
| British W. Indies | 3 | 1,449 | — | — |
| Free Ports, Canada | 225 | 14,434 | — | — |
| United States | — | — | 3 | 1,859 |
| Sweden | — | — | — | — |
| Norway | — | — | 3 | 1,056 |
| Danish West Indies | 1 | 870 | — | — |
| Hamburgh | 1 | 403 | 4 | 1,956 |
| Bremen | — | — | 1 | 381 |
| Holland | — | — | 1 | 554 |
| Belgium | 2 | 1,052 | 2 | 797 |
| France | 5 | 1,368 | 1 | 453 |
| " St. Pierre | 2 | 130 | — | — |
| " Miquelon | — | — | — | — |
| Italy | 1 | 173 | — | — |
| Spain | 7 | 4,317 | 1 | 329 |
| " West Indies | 3 | 311 | — | — |
| Portugal | — | — | 3 | 510 |
| Africa | — | — | — | — |
| South America | — | — | — | — |
| Total | 701 | 296,761 | 28 | 13,344 |

Quebec was taken from the French in 1759. A British army, under General Wolfe, having effected a landing near the city, attacked and

QUEEN'S COUNTY

defeated the French army under Montcalm, on the heights of Abraham, to the W. of the town. Wolfe fell in the moment of victory; and Montcalm, who was also mortally wounded in the action, expired soon after. The French, panic-struck by the loss of the battle and the death of their commander-in-chief, surrendered the city before even a single battery had been opened against it. A monument was erected, under the patronage of Lord Dalhousie, in the gardens of the château, inscribed to the 'Immortal memory of Wolfe and Montcalm.'

QUEDLINBURG, a town of Prussia, reg. Magdeburg, circ. Aschersleben, on the Bode, a tributary of the Saale, 7 m. SSE. Halberstadt, and 33 m. SW. Magdeburg. Pop. 15,773 in 1861, exclus. of a garrison of 938 men. The town is well built, and is surrounded by turreted walls, pierced by 4 gates. On an eminence immediately above the town is an old castle, now falling into decay, but which has a good library, and is in part converted into a school. It was formerly the residence of the abbesses of Quedlinburg, who were princesses of the empire, and had a seat on the Rhenish bench of bishops. Many of these abbesses are buried in the *Stiftskirche*, or church of the ancient abbey; in which are also the tombs of Henry the Fowler, his empress, and the beautiful Countess Königsmark, mother of Marshal Saxe. Quedlinburg has several hospitals, public schools, and various charities; with manufactures of woollen stuffs, distilleries, and sugar-refineries. The rearing of cattle and hogs employs many of the inhabs.

Klopstock, author of the 'Messiah,' was a native of Quedlinburg, having been born here on the 2nd of July, 1724: since his death a monument has been erected to his memory in the Brühl garden, near the town. Quedlinburg was formerly a free imperial city, and has been frequently the residence of the German emperors and the seat of ecclesiastical councils.

QUEENBOROUGH, a bor., sea-port, and par. of England, co. Kent, Lake St. Mary, on the E. coast of the Isle of Sheppey, at the junction of the channel of the Swale with the estuary of the Medway, 2 m. S. Sheerness, and 37 m. E. by S. London, on the London, Chatham and Dover railway. Pop. of par. 973 in 1861. The town, which is poor and mean, consists principally of a main street, having the guildhall, with a gaol underneath, near its centre. The church, an ancient structure, has a tower at its W. end; and there is, also, a chapel for Independents. A charity school for the education of the sons of the freemen are supported by the corporation and the parliamentary representatives for the bor., and there are some minor schools, and a Sunday school. The inhabs. are almost wholly engaged in the breeding and supplying of oysters for the London market.

Inconsiderable as it has long been, Queenborough enjoyed the privilege of sending 2 mems. to the H. of C. from the era of Elizabeth down to the passing of the Reform Act, when it was disfranchised. It was reckoned too unimportant to be included in the provisions of the Municipal Reform Act. A fine old castle in the vicinity of the town was demolished by order of parliament in 1650.

QUEEN'S COUNTY, an in. co. of Ireland, prov. Leinster, having N. King's co., E. Kildare and Carlow, and a detached portion of King's co., S. Kilkenny, and W. Tipperary. Area, 424,854 acres, of which 60,972 consist of unimproved bog and waste lands. Surface generally flat; and soil, except where bog occurs, for the most part very fertile. Estates mostly large; but many of them are let on

perpetual leases, the head lessees on these estates forming the middle class of gentry. These, however, have mostly relet their farms, generally in smaller divisions, to inferior tenants; and these again have subdivided them to others; so that many of the occupancies are extremely small, and held by persons too poor to be able to make any improvement. But where farms have been let on terminable leases, they are larger, and on these various improvements have been introduced, both as respects the rotation of crops, the implements of husbandry, and the stock. Dairying is carried on to some extent, and a good deal of cheese is made for the Dublin market. Coal and limestone are found in this co., but the former is not wrought. Principal rivers, Barrow and Nore. It is divided into 8 baronies and 50 parishes, and sends 3 mems. to the H. of C., being 2 for the co. and 1 for the bor. of Portarlington. Registered electors for the co. 3,438 in 1865. At the census of 1861, the co. had 16,768 inhab. houses, 18,044 families, and 90,650 inhabitants; while, in 1841, the co. had 25,438 inhab. houses, 27,442 families, and 152,930 inhabitants.

QUEENSFERRY (SOUTH), a parl. bor. and sea-port of Scotland, co. Linlithgow, on the S. shore of the Frith of Forth, nearly opposite to N. Queensferry, 8 m. W. by N. Edinburgh. Pop. 1,280 in 1861. It is a poor decayed place, which was originally founded for, and is still principally dependent on, the ferry, which has long been established at this point, across the Forth. It consists chiefly of one street, running parallel to the Frith. The only public buildings are the parish church, a dissenting chapel, and the town-hall; it has a soap manufactory and a brewery. Newhall, immediately to the E. of the town, is now the principal ferry station across the Forth, though, under certain circumstances, the ferrymen prefer the pier of the bor.

North Queensferry, on the opposite side of the Frith, which is here less than 2 m. across, is still more inconsiderable. The principal ferry business across the Forth is now, in fact, carried on between Newhaven and Burntisland, and Newhaven and Kirkcaldy. Dr. Wilkie, author of the 'Epigoniad,' was a native of S. Queensferry, having been born there in 1721. Queensferry unites with Dunfermline, Inverkeithing, Culross, and Stirling, in sending 1 mem. to the H. of C. Registered electors in this bor. 33 in 1865. Hopetoun House, the splendid mansion of the earl of Hopetoun, is situated a little W. from S. Queensferry. It occupies a commanding position, and has a noble view.

QUENTIN (ST.), (an. *Augusta Vermanduorum*), a manufacturing town of France, dép. Aisne, cap. arrond., on the Somme and on the canal of St. Quentin, 24 m. NW. Laon, on the railway from Paris to Namur. Pop. 30,790 in 1861. The town was formerly a place of strength; but, since the time of Louis XIV., its ramparts have given place to suburbs and public walks, and a fine public promenade extends on the E. side of the town, along the banks of the canal. St. Quentin is tolerably well built; its principal streets being wide, its new quarters handsome, and most of its houses modern. In the centre of the town is a large square, in which is the town-hall, a curiously ornamented Gothic edifice. The principal church, or cathedral, is a majestic pile, 416 ft. in length internally, and its nave 212 ft. in height. The hospitals, the public library, with 14,000 vols., the court-house, belfry, theatre, and concert-hall, comprise the other buildings worth notice. It has tribunals of original jurisdiction and commerce, a chamber of manufactures, a council *des prud'hommes*, a communal college, drawing and com-

mercial schools, courses of practical geometry and mechanics, and a society of arts and sciences.

St. Quentin was formerly the centre of an extensive manufacture of linen fabrics and yarn. This branch of industry has now almost disappeared, but its place has been supplied by the cotton manufacture. There are, within an area of 12 leagues round St. Quentin, embracing its arrond., with parts of the déps. Somme, Du Nord, and Pas de Calais, nearly 75,000 hands employed in weaving, bleaching, and spinning cotton, besides many more in subordinate departments. The principal articles are striped and spotted muslins and yarn, and the town and its neighbourhood have about 700 bobbinet frames. The cotton spinners, whose number is about 4,000, reside principally in the town; the weavers live in the villages and surrounding country, where most of them are petty proprietors, occupied in agricultural labour for 3 or 4 months of the year. The cotton mills of St. Quentin are by no means so extensive as those of the dép. Haut-Rhin: few employ more than 200 hands. Children are employed here at an earlier age than in the cotton factories of Alsace; but the workpeople of all ages enjoy much better health and more comforts in St. Quentin than either at Mulhausen or Lille.

Table linens, leather, soap, and sulphuric acid are also produced here; and the commerce of the town with the adjacent parts of France, Belgium, and Germany is much facilitated by the railway, as well as the canal of St. Quentin. The latter connects the inland navigation of France with that of the Netherlands, by forming a communication between the Oise, the Somme, and the Scheldt. It is remarkable chiefly for the tunnels cut through the high ground, about 4 m. N. St. Quentin. The first of these is 160 ft. below the surface, 24 ft. in width, the same in height, and $\frac{1}{4}$ m. in length. The second tunnel is on a still larger scale, being 3 m. in length, and 200 ft. below the surface. Daylight is admitted, at certain distances, by openings carried to the surface; and the tunnel being cut through a chalk rock, the sides are not built. It was finished in 1810.

St. Quentin, as previously stated, was formerly strongly fortified, and was regarded as one of the bulwarks of France on the N. In 1557, in the earlier part of the struggles between Philip II. and France, the army of the former, under the Duke of Savoy, having threatened to attack the town, defended by the famous Admiral Coligny and a weak garrison, the Constable Montmorency advanced with a considerable army to its relief, and succeeded in throwing some reinforcements into it. On his retreat, however, he was overtaken by the Spaniards, when a general action ensued, which ended in the total defeat of the French, who lost all their artillery and baggage, with about 7,000 men killed and prisoners, including many persons of distinction. The town soon afterwards fell into the hands of the Spaniards. The battle having been fought on the 10th of August, St. Lawrence's day, the vast palace of the Escorial, built by Philip II., was dedicated to the saint in commemoration of the victory.

Pierre la Ramée, better known by his Latin name of *Ramus*, one of the earliest and ablest opponents of the scholastic system of philosophy, and the Marquis Condorcet, were natives of the vicinity of St. Quentin.

QUERETARO, a city of Mexico, cap. of the prov. of its own name, in a rich and fertile valley, 110 m. NE. Mexico, and 60 m. ESE. Guanajuato; lat. 20° 36' 39" N., long. 100° 10' 15" W. Pop. estim. at 50,000. Queretaro is a well-built city, with three large squares, many handsome public

edifices, and the usual excess of convents and churches. The Franciscan monastery is spacious, and surrounded with extensive gardens; and the convent of Santa Clara is an immense building, inhabited by 250 females, including many young ladies sent thither for their education. The streets have side pavements, laid with flags of porphyry: the city is well supplied with water, brought to it by an aqueduct about 10 m. in length, carried across the valley upon 60 arches.

It is divided into 5 parishes; 4 in the body of the town, and 1 in the suburbs, separated from the rest by a little stream. 'We were much struck,' says a traveller, Mr. Ward (Mexico, ii. 183), 'with the busy look of Queretaro, which has quite the air of a manufacturing town. More than half the houses contain shops, and the pop. is engaged either in small trades or in the wool manufactories, which are still very numerous. These are divided into two classes, *obrages* and *trapiches*. The first comprises the establishments that employ from 10 to 30 looms; the last those in which only one or two are in activity. In both coarse cloths, of different patterns and sizes, are manufactured; part of which are retailed upon the spot in the great Plaza, where a market is held every evening by torchlight, and part sent to the capital or other great towns of the confederation. The demand for these manufactures has decreased very much since the ports were opened to European imports; indeed, the woollen trade is now principally kept up by a government contract for supplying the army with clothing. The price paid for scarlet, green, and yellow cloths of the very coarsest texture, varies from 24 reals (12s.) to 15 reals (7s. 6d.) per vara; and there is no doubt that they might be obtained of a better quality at a much lower price from abroad. The wool is brought principally from the northern states, San Luis de Potosi and Zacatecas; its price fluctuates from 16 to 24 reals the arroba of 25 lbs., including carriage; but the wool most esteemed is the produce of the state itself. It acquires its value, not from any superiority in the breed of the Queretaro sheep, but from the circumstance of the flocks being so much smaller than those of the north that they can be better attended to, fed in richer pastures, and kept more clear from thorns, which deteriorate the fleece. This wool sells for 3½ dollars (or 30 reals) the arroba. The manufactures of the city are conducted on the same nefarious system that prevails elsewhere in Mexico, of inveigling the Indians into debt by the voluntary advance of money, and then shutting them up in the factories.

QUIMPER, a town and river-port of France; dép. Finistère, of which it is the cap., at the junction of the Rir with the Odet, about 11 m. above where the latter falls into the Bay of Benaudet; 115 m. W. by S. Rennes, on the railway from Brest to Nantes. Pop. 11,488 in 1861. The town stands on the declivity of a hill, and is divided into the old and new town. The former, surrounded by walls flanked with towers, is ill-built; but in the new town there are some good streets and houses. The cathedral, a handsome Gothic edifice of the 15th century, and other churches; the military hospital; the college, a large structure formerly belonging to the Jesuits; the theatre, and some public baths, are the principal public buildings. The river is navigable as far as the town for vessels of 200 tons burden, those of greater size anchoring opposite its embouchure, in the Bay of Benaudet. It has manufactures of earthenware and building docks; its inhabs., also, engage in the pilchard fishery, and carry on a pretty brisk trade in provisions.

Quimper is a bishop's see, and derived its present name from its first bishop, in the 5th century; previously to which it was called *Coriospitem*. It was sacked by Charles of Blois in the year 1345. Among the distinguished men, of whom Quimper has to boast, may be mentioned Hardouin, the commentator of Pliny, celebrated alike for his learning and his paradoxes; and Freron, the most voluminous of the French critics of the last century.

QUITO, a celebrated city of S. America, cap. of the repub. of Ecuador (*Ecuador*), in a ravine on the E. side of Pichincha (a volcanic mountain, which, at no very distant period, was in a state of activity), above 9,500 ft. above the sea; 160 m. NNE. Guayaquil, and 460 m. SW. Bogota. Lat. 0° 13' 27" S., long. 78° 10' 15" W. Pop., variously estimated at from 40,000 to 70,000. Quito is, on the whole, one of the best built cities of South America. It has four broad, straight, and well-paved streets, and three large and some smaller squares, in which are the principal public buildings, and the best private residences. The streets which run N. and S. are pretty level, but those which cross them ascend the skirts of the Pichincha on the one hand, and descend on the other towards a small river, over which is a stone bridge; and from this unevenness of the ground some of them are so steep as to be impracticable for carriages, besides being, for the most part, narrow, crooked, unpaved, and almost impassable after heavy rains. So numerous, also, are the crevices in the mountain, that, in the suburbs particularly, several of the houses have been raised on arches. The houses, which are large and convenient, are mostly built of unburnt bricks, cemented with a species of mortar, used by the anc. Peruvians, which soon becomes extremely hard. On account of earthquakes, they are seldom more than one story in height, exclusive of the ground-floor, or *rez-de-chaussée*. They are flat-roofed, and have usually a balcony towards the street. Generally speaking, they are indifferently furnished, and deficient in cleanliness. The city has an abundant supply of water, obtained from several streams, which flow through it in conduits. The principal square has, in its centre, a fine brass fountain; and on its sides are the cathedral, the bishop's palace, the town-hall, and the palace of the president. The last is a gloomy-looking building, with a terrace in front, ascended by two flights of steps. In it are the halls of the *audiencia*, treasury, and archives, the president's apartments, with the offices of the public secretaries, and the gaol. The cathedral, a plain building, with a steeple at one corner, is much less handsome than several of the other churches. Quito has numerous convents. The ex-Jesuits' college has a beautiful front, with Corinthian columns, finely sculptured by native artists. The interior of this edifice is very rich, and has a library, said to comprise 20,000 vols., including several rare works. A part of the edifice has been converted into halls for the university, and another part into barracks. Previously to the revolution, the churches and convents were richly furnished with silver ornaments, plate, and paintings; but a part of this wealth has been since turned to more useful purposes.

Quito ranks rather high, at least among Spanish American cities, as a place of education. It had two universities before the time of Charles III., but they were then united into one. Besides this university, which still exists, there are several colleges under the guidance of the different religious orders. The city was made a bishop's see in 1545, and is the residence of the president, and

the seat of all the superior courts and offices of the republic.

Coarse cottons, and woollen cloths, baizes, flannels, ponchos, and stockings are made in Quito, which is also highly celebrated for its confectionery; but its chief exports consist of corn and other agricultural products. These, with some of its manufactures, are sent by way of Guayaquil to Central America, in exchange for indigo, iron, and steel; and to Peru in return for brandy, wine, and oil, and for gold, silver, and other metals, Ecuador not being very rich in mineral wealth. The foreign imports comprise all kinds of European manufactured goods, with iron, steel, and some other raw materials. The markets of Quito are abundantly provided with beef, mutton, pork, and poultry, both cheap and good; vegetables and fruits of all kinds.

The inhabitants of Quito do not differ materially from those of other Spanish American cities; bull fights, masquerades, dancing, music, and religious processions being their principal amuse-

ments. This is, no doubt, to be ascribed to the mildness of the climate, and the ease with which the ordinary necessities of life may be produced. The city enjoys, as it were, a perpetual spring. Vegetation never ceases at any period of the year; but from Dec. to March violent storms of rain and lightning almost daily occur in the afternoon. Earthquakes are, also, frequent; and one of those visitations that occurred in 1797 is said to have destroyed in the prov. above 40,000 persons, and to have had a permanent influence over the climate. A plain, about 4 leagues NE. from the city, was made choice of by the French and Spanish astronomers, in 1736, for measuring a degree of the meridian; and an inscription on a marble tablet on the wall of the ex-Jesuits' church in Quito commemorates the event, and the labours of the commission; but the most enduring memorial of that great undertaking is to be found in the 'Historical Voyage' of Ulloa. Quito was founded by Sebastian Benalcazar in 1534, and was incorporated as a city by Charles V. in 1541.

R.

RAAB (Hung. *Győr* or *Nagy Győr*, an. *Jaurinum*, *Arabo*, or *Arabonia*), a royal free town of Hungary, cap. the co. Raab, at the confluence of the river of the same name with the Danube, 22 m. WSW. Comorn, and 39 m. SE. Presburg, on the railway from Vienna to Comorn. Pop. 17,834 in 1857. The city stands in a low and marshy plain, and is rather unhealthy. Like Vienna, the city is separated from the suburbs by its old fortifications, and an open glacis, planted with trees, and forming public walks. Some of the streets are regularly built; and, besides three or four churches and a cathedral, the city has the bishop's palace, the public buildings belonging to the co. and the corporation, and some handsome residences belonging to the Esterhazy and Zichy families. It has, also, a royal academy of law and philosophy, and Rom. Catholic, Greek, and Lutheran high schools. In the centre of the city is an immense Capuchin convent, its roof surmounted with two very high and conspicuous spires. There are various other conventual establishments, 2 workhouses, 2 barracks, a theatre, and arsenal. Raab is the seat of a larger trade in corn than any other city in Hungary, and is a great depôt for the trade of Pesth with Germany and Italy. It has several large annual fairs, its commerce depending, for the most part, on its favourable position on two navigable rivers.

It was a strong post under the Romans, and has been generally kept in a defensive state by the Hungarian kings; but it was twice taken by the Turks, and, in 1809, an Austrian force was routed by the French under its walls.

RACCONIGI, or **RACONIGI**, a town of North Italy, prov. Cuneo, near the Maira, and 21 m. S. Turin. Pop. 10,415 in 1862. The town is walled, and tolerably well built: it has several good churches, but its chief ornament is a noble castle and park, belonging to the Prince of Carignano. Among the works of art in the castle are some pictures (if they may be so called), beautifully executed in silk. Silk weaving and spinning are the principal branches of industry in and round this town.

RADNOR, an inland co. of England, S. Wales, having N. the cos. of Montgomery and Salop, E. Hereford, S. Brecknock, from which it is separated by the Wye, and W. Cardigan. It is of a tri-

angular shape, and comprises 272,640 acres. With the exception of some low and comparatively fertile tracts along the borders of Hereford and Salop, and in the valley of the Wye, the larger portion by far of this co. is wild, mountainous, and dreary. It is stated, in Davis's Survey of S. Wales, published in 1815, that about two-thirds the surface consisted of waste land, mostly moor, but partly also bog. Several divisions and some extensive enclosures have, however, been effected in the interim, so that the extent of waste or common land, though still very great, has been materially diminished. At present, the wastes are mostly depastured by sheep, and this co. rears, in proportion to its size, more sheep than any other in the principality. They are mostly of a small hardy breed. Numerous encroachments have, from time to time, been made on the wastes or commons by persons who had property adjoining, and by cottagers, who erected huts on their borders, and gradually extended their gardens, till they sometimes included acres of land. A good many of the manors on which these encroachments were made formerly belonged to the crown, and having been lately sold, the purchasers have attempted to oust those who had made these encroachments. Though, no doubt, the act was illegal, still, under the circumstances, it was beneficial rather than otherwise; and having been permitted in the first instance, their rights should have been protected. The farms in the low grounds vary from 20 to 200 acres: they are mostly held at will, or from year to year; and as there are no conditions to enforce a proper system of management, agriculture is in the most backward state, there being no proper rotation of crops, and the land being frequently foul and out of order. Many of the low farms have a portion of moor or common pasture attached to them. The cattle in the low grounds are principally of the Hereford breed: there are some extensive meadows, and irrigation is well understood. There are some rather large estates, but there are, also, many of an inferior size. The minerals and manufactures of the co. are of no importance. Radnor is divided into 6 hundreds and 50 parishes, and sends 2 mems. to the H. of C., being 1 for the co., and 1 for New Radnor and its contributory bors. Reg. electors for the co. 1,597 in 1865. At

the census of 1861, Radnorshire had 38,866 inhabitants, while, in 1831, the number was 25,356. The gross annual value of real property assessed to income-tax was 33,355*l.* in 1857, and 39,854*l.* in 1862. The bor. of New Radnor, referred to above, is of great extent, embracing an area of nearly 30 m. in circ. It had a population of 2,262 in 1861, while the township had but 463 at the same census.

RAGUSA, a town of Italy, island of Sicily, prov. Syracuse, co. Modica, near the W. bank of the river of its own name, about 14 m. above the embouchure of the latter on the S. coast of Sicily, and 30 m. WSW. Syracuse. Pop. 24,449 in 1862. The inhabs., who are active and industrious, have considerable cloth and silk manufactures, and a rather extensive trade in the corn, oil, wine, and cheese of the surrounding territory. It is near the site of the anc. *Hybla Heræa*.

RAGUSA (Slav. *Dubrownik*, Turk. *Paprownik*, an. *Ransium*), a sea-port town of the Austrian dominions, prov. Dalmatia, cap. circ. of its own name, on a peninsula in the Adriatic, 87 m. WNW. Cattaro. Pop. 8,823 in 1857. The town is walled, and has two good harbours, one to the NW. and the other to the SE., which, as well as the town, are protected by several modern forts. Its streets are narrow, except one, the Corso, which intersects it from N. to S.; its houses are well built, in the Italian style, but many of them are now unoccupied. It has a cathedral, a Greek church, a Piarist gymnasium, high school, military hospital (once the Jesuits' college), lazaretto, and theatre. It is the see of a Rom. Cath. vicar-bishop, and the seat of the superior judicial courts for the circ.; it has manufactures of silk, leather, and rosoglio. Though Ragusa has greatly declined from her former importance, it still has a considerable coasting trade.

Ragusa was founded in the 7th century by some fugitives from Epidaurus in Ilyria, when that city was destroyed by the Slavi. It continued to be a republic under the successive protection of the Greeks, Venetians, and Turks, till 1806, when it was taken by Napoleon I., who erected it into a dukedom, which he conferred on Marshal Marmont. On the fall of the former, Ragusa was given to Austria.

RAJAHMUNDRY, a district of the Madras presidency in British India. (See **CIRCARS**, **NORTHERN**.)

RAJAHMUNDRY, a town of Hindostan, cap. of the above distr., on the Godavery, about 50 m. from its mouth, and 65 m. NE. Masulipatam. It stretches along the river for some distance, and has an old fort, several mosques, and a fine bazaar. It is the seat of the district court.

RAJEMAHAL (*The Royal Residence*), a town of British India, presid. Bengal, prov. Bhaugulpore, on the Ganges, 66 m. NW. Moorshedabad. Under Acbar and Sultan Shujah, the brother of Aurungzebe, it was the cap. of Bengal, and, though much decayed, it is still estimated to have 30,000 inhabs. It consists principally of one long street of stone or mud houses, generally with two stories; about a dozen market-places, scattered over a wide extent of ground; a few tombs and mosques, and the ruins of a spacious palace. The inhabs. have some traffic with the hill people of the district, but their main source of profit is derived from their supplying necessities to travellers on the Ganges.

RAJESHAIE, a distr. of British India, presid. and prov. Bengal, principally between the 24th and 25th degs. of N. lat., and the 88th and 90th of E. long., having N. Dinajepoor and Rungpoor; E. Myemunsing and Dacca Jelalpoore; W. Par-

neah; and S. the Ganges, separating it from Jessore, Nuddea, and Moorshedabad. Area, 3,950 sq. m. Pop. estimated at 1,000,000; about two-thirds Hindoos, and the rest Mohammedans. The whole surface is so low that from the beginning of July to the end of Nov. it is nearly submerged by the inundations. Towards the E. it is thickly wooded. Few solid edifices and no fortresses exist in this distr.; but it comprises many populous commercial villages, and the towns of Nattore, Bauleah, and Hurrial.

RAJPOOTANA, the largest prov. of Hindostan, towards its NW. quarter, between 24° and 31° N. lat., and 70° and 77° E. long.; having W. and N. Moultan and Labhore, E. Delhi and Agra, S. Malwah and Gujrat, and SW. Sind. Its length, N. and S., is estimated by Hamilton at 350 m., and its average breadth at 200 m., giving it an area of about 70,000 sq. m. It comprises a large extent of sandy desert, but in the S. and E. are many fertile tracts. This prov., which is wholly subject to the British, consists of a number of principalities, the chief of which are Judpoor, Jesselmere, Jeypore, Odeypoor, and Bicanere.

RAMGHUR, a distr. of British India, by far the largest under the Bengal presid., occupying all the S. part of the prov. Bahar, between the 22nd and 25th degs. of N. lat., and the 83rd and 87th of E. long.; having N. Shahabad, Bahar, and Bhaugulpore; E. Beerbloom, and the Jungle Mehals; and S. and W. the territory ceded by the rajah of Berar. Area estimated at 22,430 sq. m. Pop. estimated at 2,230,000. A large proportion of this distr. is rocky and unproductive, or covered with wood. Iron, coal, lead, and antimony exist in the hilly region of the S., but from want of capital and enterprise among the inhabitants, few, if any, mines are wrought. Many of the zemindars have very extensive possessions, and are, in a great measure, independent of British authority. There are many old brick forts in Ramghur, affording protection to hordes of banditti, and other refractory persons; but few other durable buildings. This distr. has always been notorious for crime; and hitherto, notwithstanding its great extent, has been of little value to the British government.

RAMILLIES, an inconsiderable village of Belgium, prov. S. Brabant, 18 m. SSE. Louvain. This village is famous in history from its being the scene of the great victory gained on the 23rd of May, 1706, by the allied forces, under the Duke of Marlborough, over the French, under Marshal Villeroi. The French army amounted to about 80,000 men, being superior in numbers to that of the allies. The latter, however, owing, as is alleged, to the bad dispositions and incapacity of Villeroi, gained as easy as well as a complete victory. The French lost about 8,000 men, killed and wounded, and nearly 7,000 prisoners, including 600 officers, with all their artillery and baggage. The loss of the allies did not amount to 3,000 men. The Duke of Marlborough, whose gallantry was as conspicuous as his great talents as a general, had a horse shot under him in the action; and the head of Colonel Brientfield, who was assisting his grace to remount, was carried off by a cannon-ball.

RAMPOOR, a large town of British India, prov. Delhi; on the Cosilla, a tributary of the Ganges, 112 m. E. by N. Delhi. It has two brick palaces, a lofty mosque in the principal street, the magnificent mausoleum of a former chief, and some good houses; but the greater part of the town consists of sun-burnt brick houses, with thatched or tiled roofs. Its territory is exceedingly productive, and well cultivated.

Another town, called Rampoor, situated on the

Sutleje, about 160 m. E. by N. Umritsir, is a favourite place of Hindoo pilgrimage, and an entrepôt for the commerce of Hindostan with the countries beyond the Himalaya, on which account it has a large yearly fair.

RAMREE, a town of British India, prov. Aracan, cap. of the prov., and on the island of the same name, about 115 m. S. by E. Aracan. Pop. estimated at 8,000. It stands at the head of a creek, in which there is pretty good anchorage, and has a bazaar, supplied, though meagrely, with British goods. Its inhabitants, who are a fine athletic race, carry on a brisk trade with Chittagong, Sandoway, Bassein, and Calcutta.

RAMSAY, a town and par. of England, co. Huntingdon, hund. Hurstingstone, 75½ m. N. London, by Great Northern railway, and 10 m. NNE. Huntingdon. Pop. of town, 2,354, and of par. 4,500 in 1861. The par. extends into the co. Cambridge, and has an area of no less than 17,660 acres. The town consists principally of one long street, running E. and W., with another branching off to the N. Houses mostly brick. The church, a fine old edifice, has a nave, chancel, and aisles, with an embattled tower at the W. end. The town formerly belonged to the Cromwell family, several of whom are buried in the church, but there are no monuments to their memory. It has a free-school, founded and endowed in 1663, which educates about 70 boys; and a charity-school, which educates about 50 girls, was founded towards the beginning of last century by John Dryden, esq., a relation of the great poet. The town suffered severely from fire in 1731.

Ramsay is within the great level of the fens; and in its vicinity are several shallow lakes, or meres, that called the Whittlesea, about 4 m. NW. from the town, being the largest in the kingdom. A magnificent Benedictine abbey, founded here in 969, acquired, in the sequel, great wealth and celebrity. At the dissolution, its revenues amounted to 1,988*l.* a year. A ruined gateway is all that now remains of this once famous fabric.

RAMSAY, a town of the Isle of Man, which see.

RAMSGATE, a sea-port, watering-place, and par. of England, co. Kent, on the E. coast of the Isle of Thanet, 15 m. E. by N. Canterbury, 65 m. ESE. London, by road, and 79 m. by London, Chatham, and Dover railway. Pop. 11,865 in 1861. The town, which, till the beginning of last century, was little more than a small fishing village, has risen to its present importance, partly in consequence of the construction of its artificial harbour, one of the largest of the kind in England, but principally from its having become a favourite summer resort of visitors from the metropolis. Its older portions, irregularly built, with narrow streets and mean-looking houses, occupied chiefly by the tradespeople, lie in a flat opening towards the sea by a narrow gulley, (here called *gate*, whence the name of the town,) between two very steep cliffs; the latter, which are ascended by stone steps, are now covered with good-looking, though, in general, not very substantial houses, laid out in terraces, crescents, and squares. The town is well-lighted with gas. Till 1838 the supply of water was insufficient, and constituted no small item of expense to the inhabs. of the houses on the cliffs, but an ample supply was then introduced from the neighbouring village of St. Laurence. A market-house stands at the intersection of the principal streets of the old town. The church, a large and handsome building, in the perpendicular style, with an octagonal tower, provides accommodation for about 2,000 persons: the living (created by act of parl. in 1827) is a vicarage of the annual value of 400*l.*; patron, the archbishop of Canterbury. A chapel-

of-ease is supported chiefly by voluntary subscriptions and pew rents; besides which there are places of worship for Wesleyan Methodists, Independents, Baptists, and Unitarians, and a Jews' synagogue. The town has four Sunday schools, attended by about 800 children, and there are national, Lancastrian, and infant schools, furnishing instruction to nearly 500 young persons of both sexes.

The most striking feature of the town is its harbour, one of the most magnificent works of its class in the kingdom, formed by double piers, built under the superintendence, successively, of Smeaton and Rennie. It was commenced, at the public expense, in 1750, with the intention of forming an asylum for vessels in the Downs, which might otherwise be driven on the Goodwin Sands. The E. pier extends, in a curvilinear direction, upwards of 300 yards into the sea, its total length, including its angles, amounting to 2,000 feet; that of the W. pier being about 1,500 feet. The width of the entrance is 240 feet, and the harbour area 48 acres. The general breadth of the piers is 26 feet, including a strong parapet on the outer sides next the sea. They are constructed chiefly of Portland and Purbeck stone. After the piers were nearly finished, the deposition of sand and mud within the harbour being so great as to threaten ruin to the entire project, Smeaton recommended the construction of a basin within the harbour, to be filled at high water and let out again at ebb tide, so that any deposit might be carried off by the artificial current. This was accordingly done, and has been found to answer the purpose; and, in 1787, an advanced pier was undertaken to facilitate the entrance of shipping in tempestuous weather. About the same period, a dry dock was excavated, and storehouses erected. There is a lighthouse on the head of the W. pier, whence a clear red light is displayed at night, when there are 10 ft. water in the mouth of the harbour; this notice being given, during the day, by a red flag from Sion Hill. A wet dock has been constructed near the basin for the repair of vessels. Still, however, it must be admitted that, though no cost has been spared to render this harbour as useful as possible to the shipping in the adjacent dangerous part of the Channel, it is, owing to the want of water, very defective; and, as it can be entered only at certain times of the tide, it is far from realising the expectations that were formed of its being a good refuge harbour. It is under the superintendence of an incorporated company of trustees, who appoint the chief and deputy harbour-masters and other officers. It was made a royal port in honour of a visit from George IV. in 1821; and an obelisk near the pier-gates has been erected to commemorate that most unimportant event.

Ramsgate had formerly an extensive commerce with the Baltic, but this has long declined. It has still some trade with France and Holland, chiefly in the importation of eggs, fruit, and provisions. The gross customs revenue of the port (which includes Margate and Broadstairs), amounted to 2,944*l.* in 1863. Its coasting-trade is pretty extensive, chiefly with London, Newcastle, and Sunderland. A considerable fishery of turbot and soles is carried on off the coast by boats from the W. ports of England; but only a small share of it is taken by the inhabs. of Ramsgate. Indeed the town displays little activity beyond what is caused by the influx of visitors during the summer season, and for whose accommodation passenger steamers ply daily to and from the metropolis. The smoothness of the sands E. of the harbour, and the clearness of the water, make the beach particularly well adapted for bathing, and it constitutes a very

favourite resort for visitors, hundreds of whom may here be seen in the height of the season strolling about, lounging on chairs, and enjoying the sea-breeze. The pier furnishes another delightful promenade, and on the W. cliff is a fine broad walk, extending westward towards Pegwell Bay. The bath establishments are replete with accommodation for invalids; and libraries, news-rooms, bazaars, and concerts, furnish ample means of occupation and amusement.

Ramsgate is a member of the Cinque Port of Sandwich, and is governed by a deputy, appointed by the mayor of that bor.; but judicial affairs are regulated by a local magistracy under a local act, passed in 1812. Markets on Wednesday and Saturday, but daily during summer, and exceedingly well supplied.

RANGOON, a town, river-port, and the chief entrepôt for the foreign trade of British Burmah, on the E. and principal branch of the Irawaddi (called the Rangoon river), about 26 m. from the sea, 50 m. SSW. Pegu, and 90 m. W. by N. Martaban; lat. $16^{\circ} 42' N.$, long. $96^{\circ} 20' E.$ Pop. estimat. at 25,000. The town and suburbs extend lengthwise along the bank of the river for about 1 m. by $\frac{3}{4}$ in depth; but the houses are very unequally scattered over the area. The fort, or rather wooden stockade, which constitutes the town properly so called, is an irregular oblong, entered by 8 gates and several sallyports. According to Mr. Malcolm, who visited Rangoon in 1835 (*Travels in SE. Asia*, i. 76), 'the city is spread upon part of a vast meadow, but little above high tides, and at this season (May) resembling a neglected swamp. The fortifications are of no avail against modern modes of attack. They consist of merely a row of wooden timbers set in the ground, rising to the height of about 18 ft., with a narrow platform running round inside for musketeers, and a few cannon lying at the gateways in a useless condition. A dozen foreigners have brick tenements, very shabby: there are also four or five small brick places of worship for foreigners, and a miserable custom-house. Besides these, it is a city of bamboo huts, in appearance as paltry as possible. The eaves of the houses generally descend to within 6 or 8 ft. of the ground, very few being of more than one story, or having any other covering than thatch. Hence it is very subject to fires, from one of which it is said to have suffered most severely in the year 1851. Cellars are unknown, and all the houses are raised 2 or 3 ft. above the ground, for coolness and ventilation. As the floors are of split bamboo, all dirt falls through; and what is not picked up by crows, dogs, fowls, &c., is occasionally swept out and burned. The streets are narrow and paved with half-burnt bricks, which, as wheel carriages are not allowed in the city, are in tolerable repair. There is neither wharf nor quay; in four or five places are wooden stairs, at which small boats may land passengers; but even these do not extend to within 20 ft. of low-water mark. Vessels lie in the stream, and discharge into boats.'

The river opposite Rangoon is about 600 yards across, and the town is accessible to ships of 1,200 tons' burden. The navigation, though somewhat intricate, is safe and practicable with the aid of ordinary native pilots. At neaps the tide rises and falls about 18 ft., and at springs, from 25 to 30 ft. Rangoon presents many facilities for ship-building. The banks of the river are so flat and soft, as to render docks almost unnecessary, and there is nearly a complete water communication with the teak forests of Pegu, by far the most abundant in India. Ship-building has, in fact, been carried on at Rangoon since 1786; and in

the 38 years which preceded the British capture of the town, 111 square-rigged vessels of European construction had been built, the total burden of which amounted to upwards of 35,000 tons. Several were of from 800 to 1,000 tons.

The markets of Rangoon are well and cheaply supplied with many sorts of provisions, as rice, poultry, and fish. The foreign commerce of the town is still considerable, though greatly crippled by enormous port charges and absolute prohibitions against exporting rice or the precious metals. Specie is indeed exported, but only clandestinely. The trade of the empire seaward is principally with the ports of Chittagong, Dacca, Calcutta, Madras, Masulipatam, and Penang, and occasionally with the Persian and Arabian gulfs. No direct trade has yet been carried on between Burmah and any European country. The articles exported to foreign countries from Rangoon are teak wood, catechu, stick lac, bees' wax, elephants' teeth, raw cotton, orpiment, gold and silver, gems, and ponies, which are much esteemed at Madras. By far the most important of these commodities is teak timber; the quantity of this wood annually exported is said to be equal to 7,500 full-sized trees. The principal imports are cotton piece goods from India and Britain, British woollens, iron, steel, quicksilver, copper, cordage, borax, sulphur, gunpowder, saltpetre, fire-arms, coarse porcelain, English glass ware, opium, tobacco, cocoa and areca nuts, sugar, and spirits.

About 2 m. NNW. Rangoon is the celebrated Shoe-Dagon temple, which, though rather smaller than that of Shoe-Madoo, at Pegu (which see), is much more highly ornamented. The two principal roads leading to it are lined on either side with numerous pagodas, some of considerable size. The great temple, similar to that of Pegu, stands on a planted terrace, raised upon a rocky eminence, and reached by an ascent of 100 stone steps. The area of this terrace is about 2 acres; the temple at its base is 810 ft. in diameter, and 338 ft. in height, surmounted by a *tee*, or umbrella of open iron work, 45 ft. in height, and richly gilt. The golden temple of the idol may challenge competition, in point of beauty, with any other of its class in India. The building is composed entirely of teak-wood, and indefatigable pains are displayed in the profusion of rich carved work which adorns it. The whole is one mass of the richest gilding, with the exception of the three roofs, which have a silvery appearance. A plank of a deep red colour separates the gold and silver, which has a happy effect in relieving them. All round the principal pagoda are smaller temples, richly gilt, and furnished with images of Gaudama, the sight of which, accompanied by the constant tinkling of the innumerable bells hung on the top of each pagoda, combines, with the stillness and deserted appearance of the place, to produce an impression on the mind not speedily to be effaced. The temple having long enjoyed a higher reputation than any other in the Burmese dom., is resorted to by numerous devotees, and near it live 150 families, called 'slaves of the pagoda,' to whose care it is entrusted.

RASTADT, a fortified town of W. Germany, grand duchy of Baden, circ. Middle Rhine, of which it is the cap., on the Murg, a tributary of the Rhine, 13 m. SW. Carlsruhe, on the railway from Carlsruhe to Basel. Pop. 7,428 in 1861. The town is strongly fortified, the fortress being a *Bundesfestung*, or under the nominal control of the German diet. Rastadt has wide streets, several R. Cath. and Lutheran churches, a gymnasium, lyceum, various other schools, and a palace, the residence of the last margraves of Baden, in which is a curious collection of Turkish trophies. Rastadt is the

seat of the superior judicial court for the circ. It has manufactures of tobacco, chicory, carriages, and machinery and instruments of various kinds; but is principally noted for two congresses held in it; the first, in 1714, when a treaty was concluded between Marshal Villars and Prince Eugene; and the second, in 1798-99, which terminated abruptly in the assassination of two of the French envoys.

RATHKEALE, an inland town of Ireland, prov. Munster, co. Limerick, on the Deel, 17 m. WSW. Limerick. Pop. 2,761 in 1861. The town principally consists of one street, nearly 1 m. in length, which has many good houses and shops. A par. church, a R. Catholic chapel, with an Independent and a Methodist meeting-house, a fever-hospital, dispensary, court-house, and bridewell. Several German families are settled in the town. General sessions are held four times a year; petty sessions on Thursdays. It is a constabulary station, and has a considerable retail trade. Markets on Thursdays; fairs on 7th Feb., 4th April, 1st and 19th June, 5th Aug., 18th Sept., and 18th Nov.

RATISBON (Germ. *Regensburg*, an. *Castrum Reginum*, afterwards *Augusta Tiberii*), a city of S. Germany, cap. of the Upper Palatinate, in Bavaria, on the Danube, across which it communicates with its suburb, Stadt-am-Hof, by a bridge, 1,000 German ft. in length, 64 m. ENE. Munich, on the railway from Nuremberg to Vienna. Pop. 27,875 in 1861. Ratisbon is one of the oldest towns in Germany, and has a proportionally antique appearance. Its streets are narrow and irregular; and its houses, though lofty, are altogether old-fashioned and inconvenient. Many have tall battlemented towers, with loopholes for musketry, and among the large residences are several ornamented with heraldic bearings. The cathedral is a fine Gothic edifice, begun in the 13th century, but the greater part appears to have been constructed in the 15th: its interior was formerly crowded with a number of extraneous ornaments; but these have been removed. In it are a few fine works of art, including a bas-relief on the tomb of the primate Dalberg, designed by Canova. Two older cathedrals adjoin this edifice; one, now used as a baptistery, is supposed to date from the 10th or 11th century, and the other is of a still earlier date.

Near the cathedral is a massive square tower, probably a remnant of an ancient Roman fortress. The church of St. Emmeran has some very curious monuments of high antiquity, but it is now half in ruins; and St. Emmeran's Abbey, a large though not a fine building, has been converted into the palace of the prince of Tours and Taxis. The establishment to which the latter belonged was founded long before the time of Charlemagne, by whom it was enlarged: and at the time of its dissolution, it is said to have been 1,200 years old. The Scotch Benedictine convent, a monastic institution in Ratisbon, the small revenue of which has prevented its secularisation, supports two monks and five young Scotch ecclesiastical students. It has a very curious church, supposed to date from the 10th or 11th century. The town-hall, a gloomy and irregular structure, is interesting as being the seat of the German diets from 1663 to 1806. The apartments formerly occupied by the diet present little that is remarkable; but beneath the edifice are some dungeons, in which are preserved the rack, and other machinery of torture, formerly in use.

The old bishop's palace, in which the emperor Maximilian II. died, is now a brewery. The ramparts of Ratisbon are no longer of use as a means of defence, but serve as public walks.

Within the city is a monument to the great astronomer Kepler, who expired here in 1630. Ratisbon has a royal academy, Rom. Catholic lyceum, Lutheran gymnasium, theological seminary, observatory, public library with 20,000 volumes, school of design, museum of mathematical and philosophical instruments, and botanic society. Since it has ceased to be the seat of the German Diet, it has been mostly shorn of its importance; but a good many vessels for the navigation of the Danube are built here; and it has several breweries, distilleries, tanneries, and iron works. It formerly enjoyed the exclusive right of the navigation of the Danube, upwards to Ulm and downwards to Vienna. This privilege is extinct, but it still has a large share of the traffic on the river.

At Donaustadt, on the Danube, about 6 m. distant, is the *Valhalla*, a fine Doric marble temple, built by king Louis I. of Bavaria, for the reception of statues and busts of the distinguished men of Germany. This edifice, commenced in 1830, was completed in the course of 1841.

Ratisbon was the capital of the dukes of Bavaria, till their duchy was overturned by Charlemagne. It was afterwards a free imperial city, governed by a count of the empire. In 1809, some severe fighting took place before it between a part of the grand French army, under Napoleon, and the Austrians, to the disadvantage of the latter, who were forced to retire towards Bohemia.

RAVENNA, a city of Central Italy, cap. of prov. of same name, on the Montone, amid extensive but fertile marshes, 43 m. ESE. Bologna, 84 m. NW. Ancona, and 4½ m. from the Adriatic, on a branch line of the railway from Bologna to Ancona. Pop. 19,118 in 1862. The city is famous for its architectural remains. Having been the cap. of Italy during the last years of the W. empire, and successively the residence of Honorius, Valentinian, Odoacer, Theodoric, and the succeeding Gothic monarchs, it presents many interesting specimens of the architecture of that period, few of which are elsewhere to be found. The empress Placidia, from 422 to 450, and Theodoric, from 492 to 526, embellished it with the best edifices the times were capable of producing; and many of these exist in singularly good preservation. The church of San Vittore is said to date as far back as the early part of the 4th century; but what remains of it is a mere barn, without character. The earliest perfect church is that of Santa Agata Maggiore, completed in the 5th century, having granite columns and rich marbles, apparently taken from some more ancient edifice. San Giovanni del Sagra was built by Placidia, anno 435; San Francesco apparently about the same date; St. Apollinaris Nuovo, a foundation of Theodoric, and having mosaics of that period; St. Apollinaris, at Chiassi, built by Justinian, on the ruins of an ancient temple of Apollo; and Spirito Santo, also of the 6th century. In all these churches the general plan and style are nearly the same. They consist of three naves divided by columns, supporting arches; the middle nave terminating in a semi-circular recess, covered with mosaics. The roof is of timber, and not concealed. No very distinct marks of specific difference are observable in the workmanship, between the structures of the 4th and 6th centuries, except in the ornamental parts: the capitals and mouldings of the latter period are much more fanciful. The cathedral of Ravenna was originally founded towards the end of the 4th century; but the present building is modern, and has some frescoes by Guido, bas-reliefs, and rich altars. Near it is the baptistery,

an octagonal building, probably of the same date as the ancient cathedral, and almost covered with mosaics, attributed to an archbishop who lived about 430. The baptism of Christ is represented on the dome in mosaic. The church of San Vitale, another octagonal structure, dates from the first half of the 6th century. Here, also, is a little church built by Placidia, whose tomb it contains, with those of Honorius, Constantius, and Valentinian III. Without the city is the mausoleum of Theodoric, constructed by his daughter Amalsunta.

But by far the most interesting of all the structures to be seen at Ravenna is the tomb of Dante, the immortal author of the *Divina Commedia*, who expired here, in exile, on the 14th of September, 1321.

'Happier Ravenna! on thy hoary shore,
Fortress of falling empire! honour'd sleeps
The immortal exile.' Childe Harold, iv. 59.

He was buried in the church of the Franciscan monastery, in a handsome tomb erected by his protector Guido da Polenta, restored by Bernardo Bembo in 1483, again restored by Cardinal Corsi in 1692, and replaced by a more magnificent sepulchre in 1780, at the expense of Cardinal Luigi Gonzaga. The Florentines repeatedly demanded the ashes of the mighty dead, but these demands were uniformly met by a firm denial.

The *Porta Aurea*, a triumphal arch at the W. entrance of the city, and a few remains, said to be portions of Theodoric's palace, and having some similarity to those of the palace of Diocletian, at Spalatro, comprise the principal remaining antiquities. The city has ramparts, which, however, are of little service as means of defence. Some of its squares are neat, and ornamented with statues of popes; and the streets are mostly wide and regular, but dirty; and the houses are old-fashioned, and gloomy. It has a few silk manufactures, and a large annual fair; but, like Padua, it is very dull, and fitter for study than for active business. A monastery has been appropriated to a public library, containing from 30,000 to 40,000 vols.; and a museum, with a few objects of natural history, antiquities, casts, and paintings. Few of the churches are rich in paintings, but there are some good private galleries. Byron praises Ravenna for its climate, and says, he found much education and liberality of thinking among the higher classes. It is an archbishopric, and the residence of a papal legate.

Ravenna was originally founded by a colony of Thessalians, most probably on the sea-shore, but, in the days of Strabo, it was owing to the accumulation of mud, surrounded by marshes. (Lib. v. p. 148.) Hence Silius Italicus.

'Lenta paludose proscindunt stagna Ravennæ.'
Lib. viii. v. 602.

Being difficult of approach, and well fortified, its advantages as a stronghold and a naval station were perceived by Augustus, who constructed a new harbour, about three miles from the old town, which he connected with the Po and the old city by a canal, and with the continent by a causeway. Ravenna henceforward became the principal station of the Adriatic fleet, and the new and old cities were nearly joined by intermediate buildings. But the same cause, the accumulation of mud and other matters, brought down by the Po and other rivers, that had destroyed the port of the ancient city, in no very long time destroyed that constructed by Augustus. It is now, in fact, about $4\frac{1}{2}$ m. from the sea, and so early as the 5th or 6th century of the Christian era 'the port of Augustus was converted into pleasant orchards, and a lonely grove

of pines covered the ground where the Roman fleet once rode at anchor.' (Gibbon, v. 209, 8vo. ed.) But this very circumstance, though it lessened the naval importance, increased the strength of the new city, which, from the beginning of the 5th to the middle of the 8th century, was considered as the seat of government and the capital of Italy. At length the Greek exarchate being overthrown, the city and its territory was given by Pepin to the Holy See in 773. Subsequently Ravenna successively belonged to its own lords, the Bolognese, and the Venetians, till 1509, when it fell to the pope. In 1512, the French, under the Duke de Nemours, gained a signal victory over the Spaniards, at a short distance from Ravenna, an event commemorated by an obelisk erected on the field of battle.

READING, a parl. and mun. bor. and market town of England, hund. its own name, co. Berks, of which it is the cap., on the Kennett, close to its junction with the Thames, and on the line of the Great Bath road and of the Great Western railway, 38 m. W. London. Area of parl. and mun. bor., which are co-extensive, 2,080 acres. Pop. 25,045 in 1861. The town is of considerable size, and apparent prosperity, the inhabs. having increased rapidly within the last 15 years. There are many excellent houses, and the main streets are spacious, and well lighted with gas. The town-hall, completed in 1788, is a substantial building, well adapted for municipal purposes. Reading has 4 parish churches. The church of the Greyfriars, long used as a Bridewell, was restored in 1863, and is not surpassed in architectural beauty by any in the county. St. Lawrence is a large structure, with a fine tower of flint and stone, chiefly in the perpendicular style: the other churches are of a mixed architecture; and St. Mary's is remarkable for a handsome tessellated tower. There is a chapel-of-ease and a licensed episcopal chapel in the par. of St. Mary's, and a district church in that of St. Giles; and there are places of worship for Rom. Catholics, Baptists, Independents, Wesleyan Methodists, and the Society of Friends. The town has numerous Sunday schools, furnishing religious instruction to nearly 2,000 children, and there are several subscription day schools, attended by about 800 children. The grammar school, originally founded in the reign of Henry VII., and endowed with property belonging to the decayed hospital of St. John, received great additions from Archbp. Laud, and Sir Thomas White conferred on it two fellowships at St. John's college, Oxford. It enjoyed a high reputation as a classical seminary, while the Rev. Dr. Valpy was head-master, and was then attended by 120 boys, partly day scholars and partly boarders; since then, however, it has declined, but it continues to be a respectable school, and is improving. The school is open to all boys, whether natives or residents of Reading; but none are admitted free. A bluecoat school, founded in 1646, has an endowment producing an average income of 850*l.* a year, and furnishes clothing, instruction, and an apprentice-fee to 40 boys (elected by the corporation): a girl's green-coat school, in St. Mary's par., is supported by subscription. Reading has a co. hospital, opened in 1839, and numerous almshouses and money charities, few towns in England having so large an amount of property held in trust for charitable purposes. A dispensary, eye infirmary, and savings' bank have been established within the last few years. The Reading Institution has an excellent library and news room, and it has also a subscription news room, mechanics' institute, small theatre, and two weekly newspapers are published. The trade of Reading is very considerable, but

more of a general than specific character. The manufacture of woollens was formerly extensively carried on, chiefly in a large range of buildings known as the Oracle; but the business is now wholly abandoned, and the buildings are occupied by riband and silk weavers, of whom there is a considerable number in and about the town. Floor-cloth and sail-cloth are also produced, and there are several large breweries. The trade of the town was greatly facilitated by the Kennet and Avon canal and the Thames navigation, and it has been still more increased by the opening of the Great Western railway, which has here a principal station.

Reading, which claims to be a bor. by prescription, was incorporated by Henry III., and has received many subsequent charters. Under the Municipal Reform Act, the borough is divided into 3 wards, the municipal officers being a mayor and 5 aldermen, with 18 councillors. Quarter and petty sessions are held under a recorder, and a county court is established here. The Lent assizes and winter quarter sessions for the co. are held here, besides weekly petty sessions. Reading has sent 2 mems. to the H. of C. since the 23 Edw. I., the right of voting down to the Reform Act being in the inhabs. paying scot and lot. The electoral limits were left unchanged by the Boundary Act, and in 1865 it had 1,682 reg. electors. Reading is likewise one of the polling-places at elections for the co. Markets on Wednesday and Saturday; on the latter for corn. Fairs, Feb. 2, May 1, July 25, and Sept. 21.

Reading is of great antiquity, though its origin is unknown. In 1263 Henry III. held a parliament here, and another was adjourned thither in 1453. In the great civil war it was successively occupied by the forces of parliament and of the king. Archbishop Laud was the son of a clothier in this town, where he first saw the light in 1573. In his prosperity he did not forget the place of his birth, to which he was a liberal benefactor.

RED RIVER. See MISSISSIPPI.

REDRUTH, a market town and par. of England, co. Cornwall, hund. Penwith, on an acclivity on the high road between Truro and St. Ives, 8 m. WSW. the former, and 11 m. E. the latter, and 311 m. WSW. London, by Great Western railway. Pop. of town, 7,919, and of par. 11,504 in 1861. Area of par. 3,770 acres. The town consists principally of one long street, built on the side of the hill. It has been greatly extended and improved of late years, having fully doubled its pop. since 1801, and is pretty well built, paved, and lighted with gas. Among the more recent buildings are a handsome square granite tower, with an illuminated clock in its upper part; and the savings' bank, a neat edifice with a colonnade in front. The par. church, at the foot of the Carn Bre Hill, $\frac{1}{2}$ m. SW. the town, was rebuilt about 1770. The living is a rectory, in the patronage of Lord de Dunstanville. A chapel of ease, in the pointed style, has been erected contiguous to the town, partly by a grant from the parliamentary commissioners, and partly by subscription: the living is a curacy, in the patronage of the rector. There are also meeting-houses for Baptists, Methodists, and Quakers; a grammar school, erected by voluntary contribution in 1803, with various other private and Sunday schools, a subscription reading room, and a small theatre.

Redruth owes its importance wholly to the extensive copper and tin mines in its vicinity. The Consolidated and United Mines, between it and Gwennap, are the most extensive of any in Cornwall. One of the shafts in these mines is more than 300 fathoms deep, the temperature at the

bottom being from 96° to 99° Fah. (De la Beche's Geology of Cornwall, p. 601.) The ore is conveyed by railways to Deveron, on a creek belonging to Falmouth harbour, and to Portreath and Hayle, on the N. side of the peninsula. Redruth has a brisk general trade. Markets on Wednesday and Friday, which last is one of the largest corn markets in the W. of England. Fairs, May 2d, Aug. 3d, and Oct. 12th, chiefly for cattle. Tehiddy Park, the seat of Lord de Dunstanville, is about 2 m. from the town.

RED SEA (an. *Arabicus Sinus*, or *Rubrum Mare*), an extensive inland sea between Africa and Arabia, connected with the Indian Ocean by the Strait of Bab-el-Mandeb, less than 20 m. across, between lat. 12° 40' and 30° N., and long. 32° and 44° E. Extreme length, 1,420 m.; do. breadth, 230 m.; average breadth, 135 m.; estimated area, 185,000 sq. m. It runs in a nearly direct course from NNW. to SSE., being divided at its N. extremity into two arms, the longest and most westerly of which is the Gulf of Suez, at the head of which is the port of the same name, which see. The other branch, which runs NNE., having a length of 120 m., is called the Gulf of Akaba. On the promontory between these gulfs is the mountain group of Djibbel-Musa, including mounts Sinai and Horeb, famous in Scripture history. The Gulf of Suez is more than 180 m. in length, and its breadth may average about 22 m. The strait of Djubal, the entrance to this gulf, is nearly 16 m. across.

The Red Sea, though, generally speaking, of great depth (averaging 100 fathoms), is in parts studded with rocky islets and hidden coral banks, which extend far into the channel, and sometimes impede the course of vessels. The islands are scattered pretty abundantly in all parts of the sea. Several occur near the entrance of the two northern gulfs; but by far the greater number are found at its SW. extremity, nearly opposite Massouah, this group being denominated the Dhalak Archipelago. Further S. are several other islands, one of which (called Djibbel-Teer) comprises an active volcano, rising nearly 1,200 ft. above the sea. The island of Cameran lies SW. Lobeia; and nearly opposite Hodeida, in lat. 15° N., is the group of the Zebayer islands. The coral reefs of this sea are more numerous and extensive than in any other body of water of equal extent. They extend most commonly in long strips parallel to and about $\frac{1}{2}$ m. from shore, with which they are in many cases united: the deep water runs close up to their edge, but the banks themselves are seldom more than 5 ft. below the surface. Among the reefs unconnected with the shore several are at some distance from it, a channel intervening of sufficient depth to admit of navigation by small vessels, and having good anchorage in stormy weather. These reefs are more numerous on the E. than on the W. coast; but the Dhalak Archipelago is, perhaps, more extensively intersected with them than any other part of the sea. There are also many isolated reefs; but they present few obstacles, owing to the transparency of the water, which renders them easily discoverable. No surf is ever observed on them, how boisterous soever the weather, a circumstance attributed to the porous nature of the coral on the outer edge of the reef. After all, however, these reefs offer no considerable obstacle to ships, and the shelter which they afford in some cases facilitates navigation without decreasing its speed.

The existence of the islands and reefs just described has led to a division of the Red Sea into a central and two lateral channels. The central channel, between the outer extremities of the

reefs extending from either shore, is very deep throughout, and in some parts no bottom has been found even at a depth of 250 fathoms. The breadth of this channel in the parallel of Djidda is 110 m.; but further S. it diminishes to little more than 40 m., and continues gradually decreasing down to the Strait of Bab-el-Mandeb. The inner channel, on the Arabian side, is formed partly by broken reefs and sunken rocks, partly by islands and long-continued reefs, a large part also being open to the sea: its average width is from 2 to 3 m., and the depth is very considerable, though the anchorage is so insecure as to afford little protection from the sea. The inner channel, on the opposite coast, is similarly bound to that now mentioned; but it is much narrower, and soundings can be obtained only in a few places: the harbours, of which there are seven or eight, furnish tolerably good anchorage, but it is very unsafe to anchor on the rocky shelves projecting from the reefs. Both these lateral channels are connected with the open sea by cross channels, some of which, especially N. of lat. 17°, are of great width and depth.

The winds of the Red Sea are not uniform in its different parts and channels. With respect to the central channel it may be observed, that the NE. monsoon here becomes a SE. wind of considerable force, decreasing, however, as it passes northward, and disappearing about lat. 18°, where it is replaced by the N. breezes that prevail during the warm season. The S. winds commence in October, and subside at the end of May, when they are succeeded by NW. winds, which usually bring with them thick, hazy weather, especially on the Arabian side. In the lateral channels, N. winds, inclining to land and sea breezes, are more or less prevalent, land-squalls being very common both in April and May.

The currents of the Red Sea appear to be entirely governed by the winds; for it is observed that with S. breezes they set northward, and with N. winds to the south. It is probable, also, that they increase according to the strength of either, as little or no current is perceptible during the prevalence of light, variable breezes, just before the monsoon. N. of Djidda, however, both the winds and currents are very variable throughout the year; but here even the latter depend on the former, and a strong S. wind will cause a current of 20 or 30, and even 40 m. a day. Tides have been observed in a few parts of the coast; but the rise and fall are not sufficient to allow of the conclusion that this sea is subject to lunar influence. The idea that the waters of the Red Sea were formerly at a higher level than the Mediterranean, and that the surface has been depressed by the constancy of currents flowing towards the Indian Ocean, has been abandoned. The fact seems, that from May to October, during the prevalence of N. winds, the water is 2 ft. lower than the average level; whereas from December to February, when the currents run in an opposite direction, the water collects at the N. part, which accordingly becomes unusually elevated.

The country about the Red Sea is more or less mountainous, though the high lands seldom abut directly on its coasts: indeed, this sea may be described as the lower part of a valley bounded eastward by the table-land of Arabia, and westward by a range of mountains rising from 4,000 to 6,000 ft. above the sea. Between the high grounds and the shore, however, a level district intervenes, of some extent and considerable fer-

pasturage, and the plunder of the Hadj season. Nothing, indeed, can be conceived more wretched and degrading than the condition of the people dwelling in the villages bordering the Red Sea.

The principal harbours on the E. side of this sea are Mocha, Hodeida, Lobeia, and Djidda, the first and last being by far the most important. Suez, Cosseir, Suakim, and Massouah are the chief places on the African side; and a pretty active communication is kept up between the inhabs. of the opposite shores, more particularly as the sea is crossed by all the African pilgrims on their way to Mecca and Medina. The vessels employed in transporting the pilgrims and their merchandise may amount to about 400, each averaging 130 tons; and the pilgrims from Africa alone are said to average 20,000 annually. (Geog. Journ., vi. 89.) Grain, also, and slaves are large articles of trade between the two shores: the grain is shipped at Cosseir, wholly on account of Mehemet Ali, pacha of Egypt; the slaves are brought almost exclusively from Suakim and Massouah. Mocha being the only port whence goods are exported, the Red Sea has not, till within the last few years, been much frequented by foreign vessels, except those belonging to pilgrims from Persia and India, with the merchandise of both countries; wheat, tobacco, dates, and Persian carpets being brought by the former, and rice, sugar, muslins and other fabrics, indigo, spices, and handsome young females by the latter. Coffee, frankincense, and gums are sent in exchange from Mocha; but the returns from the other ports are in cash and pearls. Within the last few years the navigation and commerce of this sea has greatly increased. The gales in the N. part of the Red Sea offer some impediments to steamers; but there are no obstacles which experience and perseverance may not overcome. Depôts for coal are established in different parts, and the steam packets run with almost undeviating regularity.

The Red Sea is first mentioned in sacred history in connection with the miraculous passage of the Israelites across the Gulf of Suez. (Exodus xiv. 21.) In the time of Solomon, two ports, Elath and Eziongeber, were established on the Gulf of Akaba; and the Phœnicians seem to have carried on a large trade on this sea, though, probably, they had no direct communication with India. The early Greek writers, including Herodotus, seem to have had very vague notions respecting the Red Sea; for the *Ἐρυθρὰ θάλασσα* apparently comprises, in their estimation, the whole extent of coast from the Indus to the coast of Africa. During the flourishing period of the Persian empire, the Persian Gulf was the medium through which Europe and Western Asia received the wealth of the East; but under the successors of Alexander, especially the Ptolemies, who exerted themselves to promote the trade of this sea, it became an important channel of intercourse between Europe and India and the East. This intercourse continued with little intermission, though not to the same extent at all times, till the discovery of the passage round the Cape of Good Hope, by which commerce was diverted into a wholly different channel. The time, however, seems now to have arrived when the Red Sea is again to recover a portion, if not the whole, of its ancient importance as a great commercial highway.

Great discrepancy of opinion has prevailed respecting the origin of the name. According to Pliny (Hist. Nat., lib. vi. cap. 23) and Quintus

seems to be that it is derived from the great abundance of coral found in it.

REGGIO (an. *Rhegium Julii*), the most S. city and sea-port of Italy, cap. of prov. of its own name, on the E. side of the Strait of Messina, 8 miles SE. Messina, and 78 miles SW. Catanzaro. Pop. 15,692 in 1862. As a city, it is inferior to its opposite neighbour Messina; but it has a fine situation in the midst of orange groves, is well supplied with excellent water, and its climate is said to be the best in Southern Italy. The former town was destroyed by the earthquake of 1783, since which Reggio has but slowly recovered its prosperity. It has been laid out on a regular plan, which, when completed, will render it a handsome city. A wide road, called the *Marina*, extends along the sea shore, parallel with which the principal street runs through the centre of the town. The houses are in general good; and as it stands on a gentle declivity, it is well drained. It has a collegiate and many other churches, several convents, a royal college, hospital, foundling asylum, and a handsome theatre. It is surrounded with walls, outside which are several suburbs. Its ancient fort no longer exists. Reggio is the seat of an archbishop, and of a civil and criminal tribunal. It has manufactures of gloves, stockings, and silk, and produces some articles from the filaments of the *Pinna marina*; which, with oil and fruit, are its chief exports.

The ancient Regium was one of the most celebrated and flourishing cities of *Magna Græcia*. It was founded nearly 700 years B.C., by a party of Chalcidians, Zancleans, and other Greek colonists; and was for 200 years the cap. of one of the principal republics of S. Italy. The government was subject to the same mutations as that of the other Greek cities, being sometimes under a democracy, but more frequently under an oligarchy, or a single tyrant. It was besieged by the elder Dionysius, tyrant of Syracuse, who having succeeded in cutting off all communication between the sea on the one hand and the country on the other, reduced the inhabs. to such distress for want of food, that a bushel of wheat is said to have been sold for 5 minas, or, according to the usual method of computing, about 15*l.* 12*s.* 6*d.* At last, after sustaining the most dreadful privations, they were obliged to surrender, when most of those who survived were sent as slaves to Syracuse. It, however, again recovered some portion of its former importance, and succeeded in repelling an attack of Hannibal. Augustus established a colony in the city. It produced several distinguished followers of Pythagoras, some historians of celebrity, and some distinguished sculptors. It suffered in antiquity, as well as in more modern times, from earthquakes.

REGGIO (an. *Regium Lepidi*), a city of N. Italy, prov. Parma, between the Tessone and Crostolo, tributaries of the Po, 16 m. WNW. Modena, and 15 m. SE. by E. Parma. Pop. 21,174 in 1862. The city is defended by ramparts and a citadel, and is well-built and rather handsome. Its streets are regular, and bordered with arcades. It has some handsome churches, numerous convents, a town-hall, theatre, lyceum, public library, and a library and museum of antiquities, collected by Spallanzani. No antiquities remain, except a statue in the principal square, traditionally said to represent Brennus, the Gallic leader. Reggio has manufactures of silk and linen fabrics, horn, wooden, and ivory articles; with some trade in cattle and agricultural produce, and a large fair, which lasts during the entire month of May.

It is supposed to have been founded by M.

Æmilius Lepidus, who constructed the famous Æmilian way. It was here that the elder Brutus was slain by order of Pompey. Napoleon erected Reggio into a dukedom for Marshal Oudinot. Among other distinguished individuals to whom this town has given birth, may be mentioned Ariosto, one of the greatest of Italian poets, born here on the 8th of Sept. 1474; and the naturalist Spallanzani: its vicinity has also to boast of being the birthplace of the great painter, Antonio Allegri, surnamed Corregio.

REICHENBERG, a town of Bohemia, and, next to Prague, the largest and most flourishing in that kingdom, circ. Bunzlau, in a well wooded part of the Lausnitz mountains, 27½ m. NNW. Gitschin, and 56 m. NE. Prague. Pop. 18,854 in 1857. The town has 3 par. churches, 2 castles, a fine school-house, a new theatre, and the largest brewery in Bohemia. It has manufactures of woollen cloth and yarn, cottons and linens, with numerous dyeing-houses.

REIGATE, a parl. bor., market town, and par. of England, co. Surrey, hund. its own name, in the valley of Holmsdale, at the foot of a range of chalk hills, traversing the co. from E. to W., 16 m. E. Guildford, and 18½ m. SSW. London, on the South Eastern railway. Pop. 9,975 in 1861. Area of parl. bor., which is co-extensive with the par., 5,900 acres. The town, which consists of a principal thoroughfare running E. and W., crossed at one end by another at right angles to it, is small, but remarkably neat, with a greater number than usual of gentlemen's houses attached to it. The old church, in the fields a little E. the town, is a large structure, in the perpendicular style, with an embattled stone tower, the rest of the building being of grey limestone: in the interior are many handsome monuments, and in an attached building is a public library. A new church, called St. Mark's, was built in 1861. The Wesleyan Methodists, Baptists, and the Society of Friends have places of worship, with attached Sunday schools. There is, also, a large national school for children of both sexes, and a small grammar school. The market-house and town-hall is a small brick building of no pretensions to beauty; and near it is a clock-house, occasionally used as a prison.

A castle once stood on an eminence N. from the town; but the only parts now remaining are the moat, and a curious excavated chamber, once used either as a prison or store-house. The priory, the property of Earl Somers, an elegant modern mansion at the S. end of the town, built on the site of an Augustine monastery, has a park of 70 acres. Reigate formerly carried on a considerable trade in oatmeal, no fewer than 20 mills being employed, previously to the American war, in its manufacture; but this business has since so much declined, that only one mill remains. Fuller's earth and white sand are found in considerable quantities in the neighbourhood, which produces an abundance of medicinal and other plants.

Reigate is a bor. by prescription, its governing officer being the bailiff of the lord of the manor. It sent 2 mems. to the H. of C. from the 23 Edw. I. down to the Reform Act, the right of election being in the burgage holders, of whom, in 1831, there were only 8, wholly under the influence of Earl Somers, the lord of the manor. The Reform Act deprived the bor. of one of its mems., and extended the electoral limits so as to comprise the entire par. Reg. electors, 835 in 1865. It is a polling place at elections for E. Surrey. Petty sessions for the hund. and the spring quarter sessions for Surrey are held here by the co. magistrates. Markets for corn on Tuesday; and a

cattle market the first Tuesday in each month Fairs, Whit-Monday, Sept. 14, and Dec. 9.

REMI, or REMY (ST.), a town of France, dép. Bouches-du-Rhône, cap. cant., in a valley 15 m. NE. Arles. Pop. 6,348 in 1861. The town was formerly surrounded with a double line of ramparts; but these have been levelled, and their place is occupied by a fine circular promenade. Streets, narrow and irregular; but there are many good houses. The town-hall, new par. church, and a lunatic asylum are the principal public buildings.

St. Remi is chiefly remarkable for its Roman antiquities, about 1 m. from the town, and supposed to belong to the an. *Glamm*. They consist of 2 edifices; one an arch somewhat similar to the central portion of that at Orange, but much mutilated; the other a beautiful Corinthian monument, square at its base, but circular above, appearing from an inscription to have been erected by Sextus L. Marcus to his parents, whose statues are in the circular portion of the structure. The Abbé Expilly, one of the most laborious and useful topographical writers of last century, was a native of St. Remi, where he first saw the light in 1719. His principal work is entitled *Dictionnaire Géographique, Historique, et Politique des Gaules et de la France*.

RENAIX, or RONSE, a town of Belgium, prov. E. Flanders, arrond. Oudenarde, cap. canton, 20 m. SSW. Ghent. Pop. 13,120 in 1860. Renaix is in a fine situation, and is embellished with several public fountains: its old castle is now in ruins, but it has some good public buildings. It has manufactures of cotton, woollen, and linen stuffs, hats, beer, and chocolate; with a considerable trade in linens, a monthly and 2 weekly markets, and 2 large annual fairs.

RENFREW, a small maritime co. of Scotland, having N. and W. the river and Frith of Clyde, S. Ayrshire, and E. Lanarkshire. Area, 145,280 acres, of which about a half may be arable. There is a large extent of hilly, moorish ground, in the W. parts of the co., and along the confines of Ayrshire; but from Port Glasgow eastwards, along the Clyde, it is comparatively flat. Soil various, being in parts thin and sandy, while in others it consists of a deep, loamy, fertile clay; and the country being in general well enclosed with hedges, and ornamented with gentlemen's seats and plantations, has a rich appearance. Tillage husbandry is in a rather backward state, and neither the rotation of crops nor the management of the land is so well understood as might have been expected. Much, however, has been done in the way of improvement during the last 40 years; enclosures have become general; new roads have been constructed; the land has been drained and limed, and the rotation of crops improved. Farm-houses and offices have also been greatly improved. On the whole, however, the co., from the humidity of the climate and the nature of the soil, is better adapted for grazing and dairying (the latter of these is extensively followed) than for tillage. There are several large estates, but property is, notwithstanding, a good deal subdivided. Farms of a medium size. There are valuable coal mines near Paisley and the eastern parts of the co., and limestone and freestone are very generally diffused. Paisley is the principal seat of the Scotch sawl manufacture; and, next to Glasgow, of the Scotch cotton manufacture: manufacturing industry is also extensively prosecuted at Pollockshaws, Neilston, and other places. Greenock and Port Glasgow, which are both in this county, are considerable sea-ports. Principal rivers, White-Cart, Black-

Cart, and Gryfe. The co. is divided into sixteen parishes, and sends three mems. to the H. of C., being one for the co., and one each for Paisley and Greenock. Renfrew and Port Glasgow are associated with other bors. in the return of a mem. Registered electors for the co. 2,276 in 1865. At the census of 1861 the co. had 11,934 inhabited houses, and 177,561 inhabitants; while, in 1841, the co. had 24,664 inhabited houses, and 155,072 inhabitants. The old valued rent was 5,764*l.*, and the new valuation 346,751*l.* for 1864-65.

RENFREW, a parl. bor. of Scotland, co. Renfrew, of which it is the cap., within about $\frac{1}{2}$ m. of the S. bank of the Clyde, 5 m. W. Glasgow. Pop. 3,412 in 1861. The town consists merely of a single street, from which several lanes issue. The only public buildings are the parish church, town-hall, and gaol. There are no native manufactures in the town, but about 260 looms are employed on account of Glasgow manufacturers. It has also a distillery, and a considerable dairy establishment. The bor. was connected with the Clyde by a canal in 1786, but it has been allowed to go into disrepair. A quay was constructed on the Clyde opposite to the town in 1835; and a railway, $3\frac{1}{4}$ m. in length, connects the bor. with Paisley. On the whole, however, it has but little trade or enterprise. The royal family of Stewart, so called from their office, had their original residence near this town. It joins with Port Glasgow, Dumbarton, Rutherglen, and Kilmarnock, in sending one mem. to the H. of C. Registered electors in this bor., 148 in 1865; councillors, 12; corp. revenue, 2,509*l.* in 1863-64.

RENNES (an. *Condate*, afterwards *Redones*), a city of France, dép. Ille-et-Vilaine, of which it is the cap., in a plain, at the confluence of the Ille and Vilaine, 61 m. N. by W. Nantes, on the railway from Paris to Brest. Pop. 45,485 in 1861. The Vilaine divides Rennes into an upper and lower town. The former, which is the largest, is regularly built and handsome; the lower town is quite the contrary. The houses in both are, however, of a dull grey stone, which gives the city a sombre appearance. Rennes has several squares, as that of the Palais de Justice, in which was formerly a bronze equestrian statue of Louis XIV.; and the Place aux Armes, planted with lime trees, and forming a favourite promenade. But it has neither public fountains nor covered market-places; and, for a city of its size, there are few public buildings worth notice. Though not fortified, it has several gates, on one of which is an almost effaced Latin inscription in honour of the emperor Gordian. Opposite this gate is the cathedral, a heavy-looking edifice, with a front flanked by two square towers, and ornamented with five rows of columns of different orders. Several of the other churches are in much better taste. The town-hall is one of the best public edifices. It has been rebuilt, together with a large part of the city, since a destructive fire in 1720, and comprises a large saloon, used for public fêtes, the halls of various judicial courts, a public library of above 50,000 vols., schools of design and architecture, and the apartments occupied by the mayor. The hotel appropriated to the use of the imperial court and tribunal of commerce is a building in the Tuscan order, having some good paintings and arabesques.

Rennes has several hospitals, a house of correction, in which various manufactures are conducted, an arsenal, artillery forges, and various military schools. It is the seat of a bishop, whose diocese comprises the dép. Ille-et-Vilaine: it is also the seat of the imperial court for the five déps. of Brittany, the cap. of the 13th military

division, and has a chamber of manufactures, a faculty of law, a secondary school of medicine, two seminaries, a tolerable museum of painting, and some other scientific establishments. In the immediate vicinity are several good promenades; the principal, the Thabor, formerly a garden of the Benedictines, on a height above the city, has a statue of Duguesclin. Though favourably situated for trade, Rennes has few manufactures: the principal are those of sail-cloth, for the navy, fishing-nets, and twine. It has, however, a considerable traffic in linens, butter, cyder, and provisions, which is much facilitated by the canal of Ille and Rance, and that between Nantes and Brest. It has 12 annual fairs.

Rennes was the cap. of Brittany from the 9th century to the Revolution. It has produced numerous distinguished men, among whom may be specified the famous Constable Duguesclin, born in the castle of Motte-Broon, in the immediate vicinity, in 1314; La Bletterie, the author of the lives of Julian and Jovian; and Ginguéné, the author of the 'History of Italian Literature.'

REPTON, or REPINGTON, a par. and village of England, co. Derby, hund. Repton, on a small affluent of the Trent, 6 m. SW. Derby. Area of par. with Bradby chapelry, 6,440 acres. Pop. 2,177 in 1861. The town consists principally of a street of scattered houses, about one mile in length, its inhabitants being chiefly agricultural. The par. church is a spacious structure, with an elegant spire, and several handsome monuments. A free school, well endowed in 1566, is held in the remains of a priory of Black Canons, established in 1172.

REQUENA (an. *Loretum*), a town of Spain, in New Castile, prov. Cuenca, on the Magro (a tributary of the Jucar), 43 m. WNW. Valencia. Pop. 7,709 in 1857. The town is surrounded with walls, and commanded by an old castle, built on an eminence; the streets are tolerably straight, lined with well-built houses, and, as in most Spanish towns, there is a spacious plaza, in the centre of which is an ornamental fountain. Three par. churches and a college are the only public buildings. The chief employment of the inhabs. is in weaving ribbands and silk goods; and Requena now furnishes a large supply of these articles to Madrid, Seville, and Cadiz. A fair is held annually in September. The neighbourhood, a portion of which is irrigated, is well cultivated, and furnishes corn, wine, fruit, saffron, and large quantities of silk.

During the war of the Succession, in 1706, the castle was taken by the English, but retaken the following year by the French under the Duke of Orleans.

RETTFORD (EAST and WEST), a parl. and mun. bor. of England, co. Nottingham, wapentake Bassetlaw, on the Idle, a tributary of the Trent, 26 m. NNE. Nottingham, and 129 m. NNW. London by road, and 138 m. by Great Northern railway. Pop. of parl. bor. of East Retford, 47,330; and of par. of West Retford, 637, in 1861. The parl. bor. comprises, together with the par. of East Retford, parts of those of West Retford, Clareborough, and Ordsall. The town consists of several thoroughfares, which meet in a common centre, and are united by cross streets. To the NE. are the hamlets of Moorgate and Spittal Hill, and to the S. South Retford and Thrumpton, to which last houses extend from East Retford, so as to form one continued line of buildings. West Retford is divided from East Retford by the Idle: the houses of East and West Retford have a respectable appearance, and the streets are lighted with gas. East Retford church is a spa-

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cious edifice of different dates, with a lofty square tower. The church of West Retford is small, but has a handsome spire. The living of East Retford is a vicarage, that of West Retford is a rectory. In the suburb of Moorgate is a new chapel of ease, in the Gothic style: there are in the town places of worship for Baptists, Independents, and Wesleyans. The town-hall is a building, surmounted by a cupola, and having beneath a good market place. There are two almshouses, one for old men, the other for women; a free grammar school, founded by Edward VI., of which the municipal authorities are trustees; a national school, established in 1813, various minor charities, a news-room, and a theatre. There is no manufactory of any kind in the town. Malting was formerly extensively carried on, and hat-making and the manufacture of worsted were introduced, but these branches have nearly ceased. The Idle is not navigable at Retford, but it communicates with the Trent by the Chesterfield Canal, which passes S. of the town, and is carried over the Idle by an aqueduct. East Retford is governed by 4 aldermen and 12 councillors. It is said to have been a borough by prescription; it received many charters from Henry III. and subsequent sovereigns, down to James I. East Retford returned 2 mems. to the H. of C. in the 9th Edward II., and continued to enjoy this privilege down to 1826. But it having been proved that gross bribery had been practised at the election that then took place, it was proposed by one party to incorporate the adjoining hundred of Bassetlaw with the bor., and by another to transfer the franchise to Manchester, Birmingham, or some other of the great towns that were then unrepresented. After lengthened discussion, the first-mentioned plan was agreed to, so that the parl. bor. of East Retford is now identical with the hundred of Bassetlaw. Registered electors, 2,514 in 1865. Markets at East Retford on Saturdays; fairs, March 23 and October 2, for horses, cattle, and cheese.

RETHEL, a town of France, dép. Ardennes, cap. arrond., on a steep declivity beside the Aisne, here crossed by a wooden bridge, 24 m. SW. Mézières. Pop. 3,712 in 1861. The town is pretty well laid out, and is improving, but the houses are mostly of wood, and there is no remarkable public building. Rethel was formerly the cap. of a co. of Champagne, and was fortified. It has a court of original jurisdiction, a communal college, society of agriculture, theatre, several hospitals, and two prisons. It is chiefly noted for its woollen manufactures, which are estimated to employ from 1,400 to 1,800 hands, mostly spinners. As in most small manufacturing towns, the work-people are generally employed at their homes. The prices of labour are somewhat lower than in Rheims, but provisions are cheaper, and, on the whole, the woollen spinners of Rethel are in a better condition than those in that city. Its trade has been considerably augmented by the opening of the canal of Ardennes: besides woollen manufactures, the town has many iron forges, breweries, and tanneries.

REVEL (Esth. *Talline*, Russ. *Kolyvan*), a seaport town of Russia in Europe, cap. of the above gov.; on a small bay on the S. side of the Gulf of Finland, 200 m. WSW. Petersburg. Pop. 21,750 in 1858. The city proper, included within the ramparts, is small, and though it has many good brick houses, its streets are narrow and irregular. There are several Lutheran, a Rom. Cath., and some Greek churches, all stone edifices; and various charitable and educational establishments, the latter including a gymnasium, episcopal semi-

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nary, and a school for nobles. The castle, a modern edifice, is appropriated to the provincial authorities; the municipal officers, who are elected by the city, reside in the town-hall. The admiralty is the principal public building. The suburbs, consisting mostly of wooden houses, cover a large extent of ground along the shore. Revel is much resorted to as a watering-place, and has some good warm baths, a theatre, several clubs or casinos, and three or four public libraries, one of which, the property of the city, is said to comprise 10,000 vols. This town is one of the stations for the Russian fleet, and has a harbour defended by several batteries. This port, which was materially improved in 1820, is deeper than that of Cronstadt, though more difficult of entrance. The roadstead, formed by some islands, is well sheltered: the long duration of the frost is the principal drawback on Revel as a naval station, though that is a disadvantage which it shares in common with the other Russian ports in the Baltic. Though not connected with the interior by any navigable river, Revel has a considerable trade. Its principal exports are corn, spirits, hemp, flax, timber, and other Baltic produce; the imports consist of colonial produce, herrings from Holland and Norway, salt, cheese, wine, tobacco, fruits, dye stuffs, cotton yarn, stuffs, and other manufactured goods. A portion of the customs' revenue is enjoyed by the town.

Revel was founded by the Danes in 1218, and afterwards sold by them to the Knights of the Teutonic Order. In 1561 it came into the possession of the Swedes, but was taken from them by the Russians in 1710. Near it is the Katharinenthal Palace, built by Peter the Great, the gardens of which are a favourite public promenade.

REUS, a town of Spain, in Catalonia, 9 m. W. Tarragona, and 54 m. W. by S. Barcelona, on the railway from Barcelona to Tarragona. Pop. 28,171 in 1857. The town stands on a plain gently sloping towards the coast, and comprises several streets lined with good houses, with numerous churches, hospitals, barracks, an orphan asylum, theatre, and handsome public fountains. The inhabitants are extensively employed in the manufacture of silk and cotton fabrics, hats, and soap; besides which there are large dye-houses, bleaching-grounds, tanneries, spirit distilleries, and glass-houses. Reus may be regarded as one of the most important manufacturing towns of Catalonia, and the numerous handsome houses in its neighbourhood indicate the industry and prosperity of its inhabs. The town is connected by a canal with the port of Salou, whence its products are exported in exchange for rice, flour, cod fish, and anchovies. Its weekly market is one of the largest in Spain, and is frequently attended by upwards of 10,000 persons.

The town was founded in the middle of the 12th century, but its present importance is wholly consequent to the establishment of silk and cotton manufactories at the close of the last century.

REUSS, a territory of Central Germany, forming two independent principalities, Reuss-Greiz and Reuss-Schleiz, between lat. 50° 20' and 51° N., and long. 11° 45' and 12° 15' E., having S. Bavaria, E. Saxony, and N. and W. the territories of Prussia, Cobourg, Gotha, and Weimar, the last dividing it into two unequal portions. Area of R. Greiz, 148 sq. m.; of R. Schleiz, 297 sq. m. Pop. of R. Greiz, 42,130, and of R. Schleiz, 83,360 in 1861. The surface is generally hilly: in the N. it is watered by the Elster, in the S. by the Saale. Tillage is less an occupation of the inhabs. than the rearing of cattle and sheep.

The most fertile tract adjoins the town of Gera. Woods comparatively extensive, and one of the chief sources of national wealth. Woollen, linen, and cotton fabrics are produced; mining is little followed, and the only metallic works are a few iron-forges. The inhabitants are almost all Lutherans. The principality of R. Greiz is ruled by the elder branch of Reuss, and consists of the lordships of Greiz and Burgh. Greiz is the chief town, and seat of the superior judicial court, whence appeal lies to the tribunal of Jena. The public revenue amounts to about 200,000 thalers a year. The younger branch of Reuss has a territory composed of the lordships of Schleiz, Lobenstein-Ebersdorf, and Gera; chief town and seat of gov., Schleiz. Appeal from the court of this principality lies also to Jena. Public revenue, about 285,664 thalers, or 42,820*l.* in 1862. Each branch has a separate vote in the full diet of the German Confed., and together with Hohenzollern, Lippe, Liechtenstein, and Waldeck, the 16th place, and a vote in the committee.

REUTLINGEN, a town of Würtemberg, circ. Schwarzwald (Black Forest), of which it is the cap., on the Eschatz, a tributary of the Neckar; 19 m. S. Stuttgart on the railway from Stuttgart to Rottenburg. Pop. 13,400 in 1861. Reutlingen presents a contrast to many other old imperial cities, having mostly regular streets, and well-built though antiquated houses. It is fortified, and has several suburbs. One of its churches has a tower 320 ft. in height: the town-hall, lyceum, a well-endowed hospital, and orphan asylum are the other most conspicuous edifices. It has manufactures of leather, lace, net for women's caps, of the annual value of 100,000 florins, clocks and watches; with dyeing and bleaching factories; and printing establishments.

Reutlingen was the first town in Swabia which embraced the Reformation.

RHEIMS, or REIMS (anc. *Durocortarum*, post. *Remi*), a celebrated city of France, dép. Marne, of which, though not the cap., it is by far the largest town, cap. arrond., in a plain near the Vesle, a tributary of the Aisne; 27 m. NNW. Chalons, and 95 m. E. by N. Paris, on the railway from Chalons to St. Quentin. Pop. 55,808 in 1861. The city is surrounded by ramparts faced with stone, which, being planted with trees, form agreeable public walks, and there are other promenades in the immediate neighbourhood. It is about a league in circuit, and is entered by six gates, one of which, the *Porte Neuve*, a triumphal arch, with handsome doors of open iron-work, was raised in honour of Louis XVI. at his coronation. Two principal thoroughfares, which meet in the *Place Royale*, divide the city into four unequal portions. It is tolerably well laid out, its streets being wide, straight, and generally clean: it has several good squares, but its houses are small, having mostly only two floors, and are constructed with monotonous uniformity. Waterworks, beyond the walls, distribute the waters of the Vesle through the town. The cathedral, one of the largest and most magnificent in Europe, is that in which the coronation of the Bourbon kings of France has taken place, with few exceptions, from the era of Philip Augustus. It was chiefly constructed between 1212 and 1242. It is 479 ft. in length, 99 ft. in breadth, and 144 ft. in height. It has a noble front, flanked with two square towers, 262½ ft. in height. Of the three grand entrances on this side, the central is 90½ ft., and those on either side 22½ ft. in width; above the former is a beautiful circular window. The whole front is ornamented with nearly 550 statues, and a great number of columns and bas-

reliefs, and similar decorations abound in every part of the exterior. In one of the towers is a bell weighing 23,000 lbs. This cathedral has some fine stained glass, tapestry, marble pavements, a very fine organ; the 'Washing the Feet,' a *chef d'œuvre* of Poussin; various curiosities, including the font said to have been used in the baptism of Clovis, and the tomb of Jovinus, a citizen of Rheims, who arrived at the dignity of Roman consul *anno* 366. The last, an admirable specimen of ancient art, was transferred from the church of St. Nicaise, destroyed during the phrenzy of the Revolution.

Rheims, which was a place of great consideration under the Romans, had various other antiquities, but they were mostly destroyed or carried off during the Revolution. The most remarkable ancient monument now existing is the *Porte de Mars*, one of the city gates; a triple archway, ornamented with eight Corinthian columns and numerous bas-reliefs, though these are now greatly defaced. This arch appears to have been erected in honour of Caesar and Augustus, when Agrippa was governor of Gaul. Without the walls are the traces of an amphitheatre. The church of St. Remi, constructed in 1041, is considered the oldest in the city. It occupies almost as much ground as the cathedral; and, though much less lofty and ornamented, is in a similar style of architecture. It contains the remains of the ancient and curious mausoleum of St. Remi. The town-hall, an edifice of the time of Louis XIII., with whose statue its front is ornamented, the new prison, *maison rouge*, which has some historical interest, theatre, and several hospitals, are among the other chief objects of notice. In the centre of the *Place* is a bronze statue of Louis XV., surrounded with allegorical figures, erected in 1818, to replace a similar statue destroyed in 1793. Rheims is the seat of an archbishop, whose suffragans are the bishops of Amiens, Beauvais, Chalons, and Soissons, and of courts of assize, original jurisdiction, and commerce, a council *des prud'hommes*, a chamber of manufactures and arts, and a college. It has a public library of 24,000 printed volumes, and 1,000 MSS., a botanic garden, and schools of mutual instruction.

Rheims is the centre of the manufacture of woollen stuffs, which extends over nearly the whole *dép.* of Marne, and the adjacent *déps.* of Aisne and Ardennes. These manufactures are estimated to occupy 50,000 hands, of whom 12,000 settled in Rheims. About 3,000 of the latter are weavers, 1-10th part of whom work at jacquard-loom, 1,500 employed in spinning yarn, 4,000 in fulling, washing, and otherwise preparing the fabrics made. For the last 25 years the woollen manufacture of Rheims has made a considerable progress in most of its branches. Workmen usually work for about 12 hours a day; those living in the city being mostly employed in the workshops of the manufacturers. In general the workpeople are well clothed and well fed, but they are said to be improvident. Rheims also produces soap, candles, biscuits, and gingerbread, and has breweries, tanneries, and leather factories. It is a principal *dépôt* for the wines of Champagne, large quantities of which are stored up in cellars, similar to those of Eprenay, which see. Besides its trade in woollen manufactures and wines, it has a considerable trade in cotton stuffs, flour, and other agricultural products.

Under the Romans *Durocorotum* was the cap. of Belgica II., and was distinguished as a seat of letters and philosophy. It became a bishopric before the irruption of the Franks, and received many privileges from the Merovingian kings. In

1359, Rheims successfully resisted the arms of Edward III. In 1547, a university was founded in it, which lasted till the revolution, when it was suppressed. In 1814 it was taken by the Russians, who were soon after expelled by Napoleon with great loss. Among the great men of whom Rheims has to boast, the most distinguished by far is Colbert, minister of finance during the most splendid period of the reign of Louis XIV., born here on the 29th of August, 1619. It has also given birth to the Abbé de la Pluche, and the historian Vely.

RHIN (BAS, or LOWER-RHINE), a frontier *dép.* of France, in the E. part of the kingdom, which, with Haut-Rhin, formerly constituted the prov. of Alsace, chiefly between the 48th and 49th degs. of N. lat., and the 7th and 8th E. long.; having N. Rhenish Bavaria and the *dép.* of Moselle, W. Meurthe and Vosges, S. Haut-Rhin, and E. the Rhine, separating it from the grand-duchy of Baden. Area, 455,345 hectares; pop. 577,574 in 1861. The W. part of the *dép.* is covered by the Vosges mountains and their ramifications. The average elevation is from 2,000 to 2,500 ft.; but the Hochfeld rises to 4,460 ft., and the Schneeberg to 2,850 ft. The surface declines towards the E. Principal rivers, the Ill, with its numerous tributaries, the Moder, Zorn, and Sarre. The arable lands are estimated at 180,920 hectares, meadows 56,024 ditto, vineyards 13,123 ditto, orchards 5,924 ditto, and woods 117,754 ditto. The marshes in the E., and the stony tracts of the W., are unsuitable for agriculture; and though the middle of the *dép.* be fertile and well cultivated, the produce of corn is not sufficient for home consumption. More potatoes are grown than in any of the neighbouring *déps.* A good deal of tobacco is raised and bought by the government. The annual produce of wine may be estimated at about 460,000 hectolitres: it is of a medium quality, but, speaking generally, is inferior to that of the Haut Rhin. About a half of the produce is consumed in the *dép.*, the rest being sent, partly to other *déps.* and partly to Baden. Hops, wood, hemp, onions, and other vegetables, are articles of extensive cultivation. The plough is usually drawn by horses. Horned cattle are numerous, but sheep are scarce. Poultry are extensively reared near Strasburg, particularly geese, the livers of which serve to make the *pâtés de foie gras*, for which that city is so celebrated. Iron mines are wrought; lead, antimony, cobalt, coal, and bitumen are met with; and salt is made from springs in the N. and W. The *dép.* has manufactures of cotton yarn, muslins, woollen and linen cloths, leather, saddlery, carriages, and glass wares. There are many iron-forges, and fire-arms are manufactured at Mutzig and Klinzenthal. Strasburg is the seat of an extensive general commerce and transit trade. Bas-Rhin is divided into four arronds.; chief towns, Strasburg the cap., Saverne, Schlestadt, and Wissembourg. The majority of the population are Protestants.

RHIN (HAUT, or UPPER RHINE), a frontier *dép.* of France, in the E. part of the kingdom, formerly comprised in the prov. of Alsace; between lat. 47° 27' and 48° 18' N., and long. 6° 45' and 7° 35' E., having N. Bas-Rhin, W. Vosges and Haute Saône, S. Doubs, and the Swiss cantons of Neuchâtel, Berne, and Basle, and E. the Rhine, separating it from the territories of Baden. Area, 410,771 hectares; pop. 515,802 in 1861. In the W. are the chains of the Vosges and Jura; one summit of the former, the *ballon d'Alsace*, rises to 4,602 ft. above the sea. The rest of the surface is mostly plain. Except the Rhine, the Ill is the only navigable river; but the canal between the

Rhine and Rhone intersects the *dép.* in its whole length. As in Bas-Rhin, the most fertile portion of the surface is in the centre of the *dép.*, where agriculture is in a pretty advanced state. The arable lands are estimated to comprise 155,571 hectares; meadows, 52,566 do.; vineyards, 11,141 do.; orchards, 5,819 do.; and woods, 113,215 do. Principal crops, wheat and barley. The produce of wine is estimated at above 400,000 hectol. a year. Some of the white wines, especially those of Guebwiller, Riquevir, and Thau, are highly esteemed. The *vins gentils* are extensively purchased by the merchants of Cologne and Frankfurt, who mix them with the wines of the Rhine, to which they impart strength and vivacity. They keep for more than twenty years, improve as they grow older, and sustain no injury from travelling. The *dép.* also produces excellent beer. There are various iron and other mines, and good building stone and other minerals are met with in various parts. Hand-loomers are scattered over nearly the whole of the *déps.* of the Haut and Bas-Rhin; the articles produced are chiefly muslins and fine calicoes. The cotton manufactures employ 100,000 individuals, or nearly a fourth part of the entire pop.; but a large proportion of these persons prosecute the cotton trade as a subsidiary employment only, carrying it on in their cottages when they are not necessarily engaged in the culture of their little patches of ground. Mulhausen, Thau, Guebwiller, Soultz, and Sainte Marie aux Mines, are the chief seats of the cotton manufacture. The homes of the weaving classes in these towns are, for the most part, dirty and comfortless, and evince every symptom of bad management and poverty. Even those who have children in the cotton mills do not keep up any appearance of comfort. The Alsatian weavers have, generally speaking, a sufficiency of food, though in all other respects they are badly off. This *dép.* has also manufactures of hardware, clocks, and watches, with various iron and steel forges. It is divided into 3 arronds.; chief towns, Colmar, the cap., Altkirch, and Belfort. Unlike Bas-Rhin, the majority of the pop. in this *dép.* are Rom. Catholics, but Protestants are numerous.

Alsace, which formed a part of the kingdoms of Austrasia and Lorraine, afterwards belonged to the German empire till 1268, when it became independent. It subsequently belonged to Austria, but was finally annexed to France by Louis XIV. in 1697.

RHINE, a large river of W. Europe, rising on the N. side of the Alps, flowing through Switzerland and Germany, and falling into the North Sea or German Ocean, between lat. $46^{\circ} 30'$ and 52° N., and long. $3^{\circ} 40'$ and $9^{\circ} 50'$ E. Length, measured along the stream, 950 m.: area of basin, including tributaries, 83,298 sq. m., or about 1-43d part of Europe. It originates in two principal streams, which have their sources on the N. side of the Penine Alps: the principal of these, called by the Germans Vorder-Rhine, is formed by the junction of two small streams flowing from the N. side of Mount St. Gotthard, at an elevation of 6,581 ft. above the sea; lat. $46^{\circ} 32'$ N., long. $8^{\circ} 53'$ E.; only a few miles from the source of the Rhone. Hence the main stream, which soon becomes enlarged by the affluence of numerous brooks and mountain torrents, takes at first a NE. direction through the magnificent and stupendous ravine of the Rheinwald, enclosed on both sides by almost perpendicular rocks, rising 3,000 ft. above the river, and clothed to their very summit with stately firs. At the lower end of this valley, and only a few miles above Chur, near Reichenau, the river is joined by its E. branch, the Hinter-Rhine, which

rises on the side of the Moschelhorn or Vogelsberg, near the pass of St. Bernard. At Chur the river deflects N., maintaining that general direction through a fertile and romantic valley, abounding with vineyards, as far as the Lake of Constance, into which it pours its waters, their level at this point being 1,255 ft. above the sea, or 5,326 ft. below the source. The river, leaving this beautiful lake at its W. end, near the town of Constance, enters a smaller expanse of water, called the Unter- or Zetter See, in which is the island of Reichenau, and thence, narrowing its channel, runs W. to Schaffhausen; 3 m. below which the stream, pent between lofty rocks, and divided by craggy islets, falls over a ledge of rocks 76 ft. in height, forming one of the most celebrated European cataracts. (See SCHAFFHAUSEN.) The channel, from this point to Basle, is extremely tortuous, winding through lofty rocks, which confine the waters within a narrow compass, and consequently increase the rapidity of the current. At Zuzach, about 1 m. above the confluence of the Aar, occurs a second fall, down which, however, the natives venture their loaded barks, except during the spring floods. The river maintains its W. direction through a rocky valley, interrupted with frequent crags rising above the stream, as far as Basle, where it is crossed by a bridge 600 ft. in length. Here commences the navigation of the river, its level at this point being 827 ft. above the German Ocean.

Basle seems to be the proper point of division between the Upper and Lower Rhine; for the navigation above this town is so interrupted by falls and rocks as to be scarcely of any importance, whereas from hence to the mouth boats pass at almost all seasons of the year. Assuming at Basle a pretty constant N. course, the Rhine becomes the boundary between France and the grand duchy of Baden, and afterwards between Baden and Rhenish Bavaria, the cities and towns in this part of its course being Mannheim, on the E. bank, at the confluence of the Neckar, and Strasburg, Speier, Oppenheim, and Mayence, on the W. bank. At the last of these towns, at the junction of the Mayn, the stream takes a sudden turn W. to Bingen, on the W. bank, from which point the course of the river is pretty uniformly NW. to the delta at its mouth. Coblenz, at the confluence of the Moselle, Bonn, Cologne, and Clèves are the chief towns on the W. bank; those on and near the E. side comprising Wiesbaden, Dusseldorf, Wesel, and other places of inferior size. The delta of the Rhine is the largest in Europe, not even excepting that of the Wolga: it extends, with its ramifications, 110 m. along the coast, from the E. shore of the Zuyder-Zee to the S. branch of the Maas; and the distance from the apex, about 10 m. below Emmerich, being 72 m., the total area of the country comprised within its limits is 4,150 sq. m. When the river divides, the left or S. arm takes the name of Waal; and the other, retaining that of the Rhine, is connected, a little farther N., by an artificial canal with the Yssel. Still lower down the Rhine takes the name of the Leck, in order to distinguish it from the old Rhine, now sanded up, which passed by Utrecht and Leyden to the sea at Catwyk. The Rhine has at present three mouths. About two-thirds of its waters flow to the sea by the Waal, the remainder being carried partly to the Zuyder-Zee by the Yssel, and partly to the ocean by the Leck and Maas, on which is the great Rhenish port of Rotterdam. These branches, however, are so interlaced with natural and artificial channels, and there are so many lagoons and marshes in this district, that a map becomes indispensable to any detailed description.

The entrance to the **Maas**, leading to Rotterdam, lies in lat. $51^{\circ} 56' N.$, and is commonly called the **Briel-gat** or channel: it has a bar across, on which there are $7\frac{1}{2}$ ft. water at neap-tides. Spring-tides rise here from 11 to 12 ft., and neaps 6 or 7 ft.

The breadth and depth of the Rhine in different parts of its course have been accurately determined by repeated observations. At Chur, in the Grisons, it is 260 ft. in width, or about as broad as the Thames at Richmond; at Schaffhausen the width is 370 ft., and at Basle, 550 ft. The breadth of the stream between Basle and Strasburg is much increased by the numerous islands that interrupt the current; but from the last-mentioned place to Speier the width varies from 1,000 to 1,200 ft. The size of the Rhine thence downwards to Coblenz gradually increases to near 2,000 ft. in width; but near that point it enters a mountainous defile, and becomes much narrower, widening again at Cologne, where it is 1,400 ft. across; and lower down to its mouth, in the principal navigable branches, it has a breadth exceeding 2,000 ft. The depth of the channel from Basle to Strasburg averages about 12 ft.; and below the latter town the river is navigable by large steamers and vessels of considerable tonnage. July is the season when the river is fullest, and it then rises about 12 ft. above its average height. May and October are the seasons of low water. The descent of the river, and consequently the rapidity of the current, are extremely variable in different parts; but the mean inclination from Strasburg is estimated at about 1.3 ft. per mile; and the current may average somewhat more than 3 m. an hour, though below Cologne it is greatly decreased, the Rhine there becoming comparatively a sluggish river.

The affluents of the Rhine are very numerous, but the chief tribs. belong to the portion below Basle. The only navigable affluent above that point is the Aar, a stream which drains the greater part of Switzerland, and brings down nearly an equal volume of water with the Upper Rhine itself. It rises in the great mass of St. Gothard, passes through a narrow valley, in which is the cataract of Aarfall, 150 ft. in height, afterwards enters the lake of Brienz, and thence, after passing through the lake of Thun (1,875 ft. above the sea) runs past Berne, and enlarged by different tribs., bringing down the waters of lakes Lucerne, Walendstadt, and Zurich, joins the main river at Coblenz ($47^{\circ} 26' N.$, and $8^{\circ} 15' E.$), with a wide and powerful current. Its chief affluents are the Reuss and the Limmath; the former rising on the NW. side of Mount St. Gothard, receives the waters of lakes Lucerne and Zug, while the latter rises in the Oberland Alps, and runs through the Lake of Zurich, both joining the Aar on its E. bank, about a mile from each other; both are navigable except during the spring floods, but owing to the rapidity of the current boats ascend empty.

Below Basle the Rhine is joined by many large tribs., the most important of which enter from the E. or right bank. The first of these is the Neckar, which falls into the main river at Mannheim, about 214 m. below Basle. It rises in the Black Forest, in about lat. $48^{\circ} N.$ and $8^{\circ} 30' E.$, and has a very tortuous course, first NE., subsequently NNW., and lastly W., of more than 180 m. It is navigable for large barges up to Heilbronn, and for small craft as far as Stuttgart. The Mayn, which enters the Rhine at Mayence, or Mainz, about 20 m. below Frankfurt, which is on its N. bank, is a most important tributary. Large river barges, vessels of 100 tons burden, ascend as high as Kitzingen, which is 165 m. from the mouth: its entire course is estimated at 320 m. (See MAYN.) The Lahn joins the Rhine about 48 m. below

Mayence; it is about 140 m. long, but is not navigable above Limburg, 24 m. from the mouth. The Ruhr and the Lippe are two other considerable tribs. on the E. side; both navigable for about 100 m. The principal affluent on the W. bank is the Moselle, which rises on the W. side of the Vosges, at an elevation of 2,356 ft., and after flowing past Nancy, Metz, and Trèves (near which it is joined by the Sarre), enters the main river at Coblenz, after a course of 280 m. The confluence of the Meurthe, 160 m. below the source, marks the extent of the navigation. The Meuse, or Maas, rises in the dep. of the Upper Marne, on one of the W. offsets of the Vosges, and running with a tortuous course, somewhat like the letter S., past St. Mihiel, Verdun, Sedan, Mézières, Namur, Liège, and Maestricht, joins the Waal, or principal stream of the delta, near Corkum, below which, as already observed, the main stream assumes the name of Maas down to its mouth.

The geology of the valley of the Rhine has been rather extensively investigated by Boué, Von Buch, Brongniart, and other naturalists. The bed of the Upper Rhine, from its source to the Chur, is formed of primitive rocks, chiefly gneiss and porphyritic granite; but at this point, gran-wacké, blue limestone, and old red sandstone become the prevailing rocks, as far as the Lake of Constance, where they are succeeded by tertiary formations, probably of more recent date than the gypseous strata of the Paris basin. Secondary and tertiary rocks line the river from Basle to the Neckar; but from this point to Bingen, below the confluence of the Mayn, granite, gneiss, and mica-schist, form the substance of the high crags that line the river on both sides. Lower down, the cliffs are composed of secondary limestone, with superimposed strata of new red sandstone; and in some parts volcanic rocks are found curiously interspersed with the inferior chalk strata. The coal formations are found in the upper parts of the Ruhr and Lippe, this part of Rhenish Prussia furnishing the chief supply of that mineral for the purposes of steam navigation. Below Düsseldorf the tertiary rocks are replaced by diluvial and alluvial formations, which form the subsoil of the delta. Geologists, however, are of opinion that the numerous islands in this intricate delta have been formed not so much by deposits brought down by the river, as by the inroads which the sea is continually making on this coast.

The scenery of the Rhine has been justly admired by travellers. Wildness and rude grandeur characterise it in the defiles above the Lake of Constance, and the country from the Unter-See westward, as far as Rheinfelden, 6 m. above Basle, is almost equally romantic. But at this point the character of the scenery changes, and the river, formerly an inconsiderable feature in the landscape, becomes a broad and majestic stream, flowing as far as Mannheim through a rich open valley, from 30 to 50 m. in breadth. The banks there begin to be more bold and rocky, but the scenery most generally admired is between Mayence and Coblenz. The Rhine here pursues a meandering course, pent between lofty and craggy mountains, and resembles rather a succession of lakes than a river. Here, indeed,

'The river nobly foams and flows,
The charm of this enchanted ground,
And all its thousand turns disclose
Some fresher beauty varying round.'

Childe Harold.

The mountains, however, are only mountains in miniature. The groves on the hill-sides are few and far between; but there is no grove without a

church spire rising in the midst, and overtopping the trees. Frequently a daring and fantastic cliff, crowned by an ancient castle, frowns over the river, or rises majestically from the brow of the steep.

The Rhine, with its various affluents, comprises a navigation of about 1,500 m., and, in a commercial point of view, is perhaps the most important river in Europe, owing to the numerous states to which it affords a water conveyance. The following table exhibits the extent of the states, or portions of the states, included within the valley of this great river:—

| | Sq. M. | | Sq. M. |
|-------------|---------|---------------------|--------|
| Switzerland | 12,400 | Other German States | 9,042 |
| France | 115,000 | Belgium | 4,100 |
| Austria | 860 | Netherlands | 6,620 |
| Baden | 4,644 | | |
| Bavaria | 16,000 | Total | 83,298 |
| Württemberg | 5,320 | | |
| Prussia | 81,152 | | |

The navigation of the Rhine has always been of considerable importance, but since the employment of steamers, and the abolition of the tolls and other political obstacles to its free use, its importance as a channel of navigation and traffic has been immeasurably increased. Vessels of large burden ascend the river to Cologne, and Strasburg is reached by those of 80 or 90 tons. There is quite a fleet of steamers on the Rhine between Strasburg and Rotterdam, and a vast increase has taken place in the number of passengers in recent years, despite the lines of railway which run along the banks of the river.

Besides the goods conveyed up and down the Rhine in steamers and sailing vessels, immense quantities of timber are sent down in the form of rafts. The smaller rafts, from the Upper Rhine and the smaller affluents of the river, used formerly to rendezvous at Namey, near Andernach, where they were consolidated into rafts of a larger size, that were sent down the river to Dordrecht, where they were generally broken up, and the timber sold and forwarded to its final destination. Of late years, however, the plan of constructing very large rafts has begun to fall into disuse. A traveller (Autumn on the Rhine), thus describes the rafts. 'A little below Andernach the little village of Namey appears on the left bank, under a wooded mountain. The Rhine here forms a bay, where the pilots are accustomed to unite together the small rafts of timber floated down the tributary rivers into the Rhine, and to construct enormous floats, which are navigated to Dordrecht, and sold. These machines have the appearance of a floating village, composed of twelve or fifteen little wooden huts, on a platform of oak and deal timber. They are frequently 800 or 900 ft. in length, and 60 or 70 in breadth. The rowers and workmen sometimes amount to 700 or 800, superintended by pilots, and a proprietor, whose habitation is superior in size and elegance to the rest. The raft is composed of several layers of trees, placed one on the other, and bound together: a large raft draws not less than 6 or 7 ft. of water. Several smaller ones are attached to it by way of protection, besides a string of boats loaded with anchors and cables, and used for the purpose of sounding the river and going on shore. The domestic economy of an East Indian or an English man-of-war is hardly more complete. Poultry, pigs, and other animals are to be found on board; and several butchers are attached to the suite. A well-supplied boiler is at work night and day in the kitchen: the dinner hour is announced by a basket stuck on a pole, at which signal the pilot gives the word of command, and the work-

men run from all quarters to receive their messes. The consumption of provisions in the voyage to Holland is almost incredible; sometimes amounting to 40,000 or 50,000 lbs. of bread; 18,000 or 20,000 of fresh, besides a quantity of salted, meat; and butter, vegetables, &c. in proportion. The expenses are so great, that a capital of three or four hundred florins is considered necessary to undertake a raft. Their navigation is a matter of considerable skill, owing to the abrupt windings, the rocks, and shallows of the river; and some years ago the secret was thought to be monopolised by a boatman of Rüdesheim and his sons.

The *Rhenus*, or Rhine (Gr. *Ῥῆνος*), became first known to the Romans by the conquest of Julius Caesar, who crossed it twice to punish the Germans. It is thus described by him:—'*Rhenus oritur ex Lepontiis qui Alpes incolunt, et longo spatio per fines Nantuatium, Helvetiorum, Sequanorum, Mediomatricorum, Tribucorum, Trevirorum citatus fertur; et ubi oceano appropinquat, in plures diffuit partes, multis ingentibusque insulis effectis, quarum pars magna a feris barbarisque nationibus incolitur (ex quibus sunt qui piscibus atque ovis avium vivere existimantur), multisque capitibus in oceanum influit.*' (Bell. Gal., iv. 10.) Ancient writers, though agreed with respect to its general course, differ respecting the number of mouths by which it falls into the ocean. Tacitus (Ann. ii. 6.) speaks of two only, one of which, probably the modern Waal, he terms *Vahalis*, and the other *Rhenus*. Pliny and Ptolemy, however, say that there were three mouths, the most northerly of which, called *Flevum*, was supposed to have been formed by a channel dug by Drusus, to connect the Rhine with the IJvala, which is, most probably, identical with the Yssel, as Pomponius Mela (iii. 2) assures us that it fell into the lake *Flerio*, or modern Zuyder-Zee. No doubt, however, the channels of the river in the delta must have shifted, both prior and subsequently to the accounts given by the classical writers; besides which, the inroads made by the sea on the coast of Holland render it impossible to ascertain what may have been the exact number of its mouths at any very remote period.

RHINE (PROVINCE OF), a prov. containing the S. portion of the Prusso-Rhenish states, having N. Holland, E. the prov. of Westphalia, Nassau, and other German States, S. France, and W. the latter, Belgium, and Holland. It lies between $49\frac{1}{2}^{\circ}$ and 52° N. lat., and 6° and $9\frac{1}{2}^{\circ}$ E. long. Area, 10,289 sq. m. Pop. 3,216,948 in 1861. Principal towns Aix-la-Chapelle, Cologne, Coblenz, Düsseldorf, Elberfeldt, Treves, and Bonn. It is divided into 5 regencies, and these again into 59 circles. Principal rivers, Rhine, which traverses almost the whole extent of the prov., Moselle, Saar, and Ruhr. Surface various. Its E. part to the N. of the Moselle consists principally of volcanic mountains, and a chain of the same sort (Eifel Gebirge) runs across the prov. between Malmedy and Coblenz. The debris of volcanic rocks being particularly suitable for the growth of the vine, it is very extensively cultivated; the product of the vines of the Rhine and the Moselle being estimated at about 700,000 cimers a year. Exclusive of wine, the principal raw products consist of potatoes, corn, flax and hemp, timber, and tobacco. Manufactures in the Lower Rhine are both extensive and flourishing. In the town of Aix-la-Chapelle, Eupen, Malmedy, and Montjoie, along the Netherlands frontier, and in Elberfeldt, Barmen, and others to the E. of the Rhine, improved machinery is to be met with; and the manufacture of fine woollen cloths, casimeres, fine and coarse cottons, and silks, is prosecuted with great success. The iron works and

hardware manufactures are also important and valuable.

RHODE ISLAND, the smallest state of the N. American Union in New England, comprising a territory on both sides Narragansett Bay, having N. and E. Massachusetts, W. Connecticut, and S. the Atlantic. Area, 1,306 sq. m. Pop. 174,620 in 1860. This state derives its name from an island in Narragansett Bay, 15 m. in length by 3 m. in width; besides which, it includes several small islands in the Atlantic. Surface generally broken and hilly; soil moderately productive. Small rivers numerous; the principal are the Pawtucket and Pawtuxet; they all have their embouchure in Narragansett Bay, a fine sheet of water, extending more than 30 m. inland, and having several good harbours. Rye, barley, oats, and in some places wheat, are produced in quantities sufficient for home consumption; cider is made for exportation; artificial grasses are raised in large quantities; cattle of a good breed; but the inhabs. generally have applied themselves more to commerce, the fisheries, and manufactures, than to agriculture. Iron, copper, marble, and freestone are among the minerals; and there are extensive beds of anthracite coal; but this, though good, has been hitherto little wrought. Principal manufactures, cotton and woollen goods, leather, hardware, and machinery; there are, also, calico printing and bleaching works, and numerous iron foundries. **PROVIDENCE** (which see) is the chief commercial town; and with Newport, the cap. and seat of government, Bristol, Warwick, and Coventry, are the other principal towns. Rhode Island is the only state in the Union without a written constitution: it continues to be governed by the provisions of the old royal charter. The governor and lieutenant-governor are chosen annually; and, with 33 other members, compose the senate. The house of representatives consists of 72 members, elected annually. The general assembly, composed of these two chambers, meets once a year. The judicial power is vested in a supreme court, and a court of common pleas for each of the five cos. in the state. The judges continue in office till removed by a vote of the general assembly. The state appropriates 50,000 dolls. a year for the support of common schools; a larger sum is raised by the towns for the same purpose, and the instruction fund receives considerable aid from private contributions. The most numerous religious sects are Baptists and Congregationalists. The militia of the state consists of all able-bodied males between 18 and 45 years of age, with but few exceptions.

This state was first settled, in 1636, by a person of the name of Williams, banished from Massachusetts on account of his religious opinions. Williams obtained a charter for Rhode Island and Providence Plantations in 1644; but, in 1663, the present ruling charter was granted by Charles II. Rhode Island suffered greatly during the revolutionary war. It sends two representatives to congress.

RHODES, a famous island of the Mediterranean, belonging to Turkey, off the SW. coast of Asia Minor (an. *Lycia* and *Caria*), 10 m. S. Cape Volo; the city of Rhodes, at the NE. extremity of the island, being in lat. $36^{\circ} 26' 53''$ N., long. $28^{\circ} 12' 51''$ E. It is about 45 m. in length, NE. and SW., and is, where broadest, about 18 m. across. Pop. estimated at 30,000, of whom rather more than a third are Greeks. A chain of mountains runs lengthwise from one end of the island to the other; their highest summit (Mount Artemira (an. *Atabyras*, on which was a temple of Jupiter), commanding a noble view of the island

and of the adjacent shores of Asia Minor. In antiquity this mountain chain was covered with dense forests of pine, whence the Rhodians drew supplies of timber for their fleets, and in modern times it has supplied considerable quantities for the dockyards of Constantinople. Speaking generally, the soil in the lower parts is dry and sandy; but it has some fine valleys, and is well watered by the numerous streams that descend from the mountains. In antiquity it was famous for its fertility:

'A region pregnant with the fertile seed
Of plants, and herbs, and fruits, and foodful grain:
Each verdant hill unnumber'd flocks does feed;
Unnumber'd men possess each flowery plain.'
Pindar, by West: Olympic Odes, No. 7.

But, owing to the insecurity and extortion of which the inhab. have been long the victims, its agriculture is in the most depressed state, many of its finest fields being allowed to lie waste, and the island not producing corn sufficient even for its scanty population. Its wheat is still, however, of the finest quality; though, perhaps, sadly degenerated from that mentioned by Virgil as being fit for the feasts of the gods:—

'Non ego te, Diis et mensis accepta secundis,
Transferim, Rhodia, et tumidis, Bumaste, racemis.'
Georg. lib. ii. line 101.

The island also produces oil, oranges, citrons, and other fruits; and, but for the grinding despotism by which it is weighed down, it might produce, in profusion, most necessities and luxuries. Marble is quarried in several parts of the island. The climate of Rhodes (*claram Rhodon*, Hor.) is probably the finest in the Mediterranean. 'It is,' says Dr. Clarke (*Travels*, iii. 278), 'a truly delightful spot, and its gardens are filled with delicious fruit. Here, as in Cos, every gale is scented with the most powerful fragrance, wafted from groves of orange and citron trees. Numberless aromatic herbs exhale, at the same time, such profuse odour, that the whole atmosphere seems to be impregnated with a spicy perfume. The present inhabitants of the island confirm the ancient history of its climate, maintaining that hardly a day passes throughout the year in which the sun is not visible.' The heat, which otherwise would be oppressive, is tempered by the wind, which blows with little variation from the N. and NW. The only beasts of burden used in the island are mules and donkeys, there being no camels and but few horses, and those only belonging to the richer Turks. Partridges are very abundant. Various species of excellent fish, with coral and sponges, are found in the adjacent sea.

The city of Rhodes is situated, as already stated, at the NE. extremity of the island. It is built amphitheatrically, on ground rising gently from the water's edge, and is strongly fortified, having a moated castle of great size and strength, and being surrounded by walls, flanked with towers. These works were constructed by its former masters, the knights of St. John. The town consists generally of narrow winding lanes and mean houses. When in possession of the knights it had many substantial stone houses, some of which, as well as the public buildings, were ornamented with the arms of the knights in *alto relievo*; but the greater number of these houses are now in a state of ruin, and such as have been rebuilt in their stead are mere wooden fabrics. Contrary to what might have been expected, the best streets in the city are in the quarter inhabited by the Jews. The Greeks occupy a distinct quarter, behind and SE. from the city properly so called. On the land side the city is surrounded by a burying-ground, and

beyond it are the suburbs, consisting of detached and finely situated houses, surrounded by gardens, many of which, however, are said to be unoccupied. The ancient palace of the grand master is now the residence of the pacha; the large and fine church of St. John is the principal mosque, and the grand hospital has been converted into a public granary. It has two harbours; the smallest, a fine basin, with a narrow entrance, is protected on all sides from the wind; but the Turks having allowed filth and sand to accumulate in the entrance, it can now be used only by the smaller class of vessels: the other harbour is much larger, and has deep water, but is safe only during westerly winds, those from the NE. throwing in a heavy sea: on this account large vessels prefer anchoring in the roads in 21 fathoms water, from its being more convenient for getting out to sea, in the event of the wind setting in strong from the NE. A lighthouse is erected on a mole between the two harbours. Several ships for the Turkish navy have been built at Rhodes, but the trade of the town is quite inconsiderable. There are some, though but few, remains of antiquity in the city, the barbarism of its Saracenic and Turkish conquerors, and the recurrence of destructive earthquakes, having destroyed most memorials of its former splendour.

Historical Notice.—Rhodes was, early distinguished by its wealth, its naval power, the wisdom of its laws and institutions, and its superiority in art and science. Tlepolemus, a prince of Rhodes, distinguished himself at the siege of Troy; and the island could then boast of the then famous cities of Lindus, Jalysus, and Camirus. The city of Rhodes is much less ancient, having been founded during the Peloponnesian war. But its advantageous situation, and the excellence of its harbour, soon gave it a decided superiority over the other towns of the island, many of whose inhabitants withdrew to it; and it was, in fact, one of the best built and most magnificent cities of the ancient world. It had been constructed with the greatest regularity, its streets being wide and straight, and the houses in each being of the same height, and built on the same model. Pliny calls it *civitas libera et pulcherrima* (Hist. Nat., lib. v. cap. 31); and Strabo, who had seen Rome, Alexandria, and other great cities of the ancient world, gives the preference to Rhodes. 'The beauty,' says he, 'of its harbours, streets, and walls, and the magnificence of its monuments, render it so much superior to all other cities, as to admit of no comparison.' (Lib. xiv.) Its temples, especially those dedicated to Bacchus, Diana, Isis, &c., were celebrated alike for the magnificence of the building, and the statues and paintings with which they were enriched. In the noble ode already referred to, written about 500 years B.C., Pindar alludes as follows to the excellence of the Rhodians in statuary:—

'Thence in all arts the sons of Rhodes excel;
Tho' best their forming hands the chisel guide;
This in each street the breathing marbles tell,
The stranger's wonder, and the city's pride.'

The most famous of the works of art in Rhodes were two pictures, of the most transcendent merit, by Protogenes, the contemporary and rival of Apelles (Strabo, lib. xiv.; Pliny, Hist. Nat., lib. xxxv. cap. 10), and the Colossus, the work of Chares of Lindus, deservedly reckoned one of the wonders of the world. This magnificent brazen statue, erected in honour of Apollo, the tutelary deity of Rhodes, is said to have been 70 cubits (about 105 ft.) in height, and of the most admirable proportions. It was set up about anno 278 B.C., and was thrown down by an earthquake 56 years thereafter; and it is a curious fact, that it

lay where it fell for nearly 890 years, or till A.D. 667, when the island, having been taken by the Saracens, they broke the statue to pieces, and sold the brass. Blaise de Vigenere, a writer of the 16th century, stated, for the first time, that the Colossus stood with a foot on each side the entrance to the port, and that the largest vessels, under full sail, passed between its legs. This story, which carries absurdity on its face, and for which there is not a shadow of authority in any ancient writer, having been adopted by Rollin, has thence found its way into most modern works. (Pliny, lib. xxxiv. cap. 7; Rollin, Hist. Ancienne, iv. 137, 4to. ed.; Savary's Letters on Greece, Eng. trans., 63; Biographie Universelle, art. Chares.) Exclusive of this matchless work, Rhodes had 105 colossal statues, each of which might, according to Pliny (*loc. cit.*), have sufficed to illustrate the town.

The wealth of the Rhodians was derived partly from the fertile soil and advantageous situation of their island, but more from their extensive commerce and commercial navigation, and the wisdom of their laws, especially those having reference to maritime affairs. Such, indeed, was the estimation in which the latter were held, that the rule of the Rhodian law *de jactu* was expressly embodied in the Digest (lib. xix. tit. 2), and has been thence adopted into all modern codes. Indeed, the fair presumption seems to be, that most of the regulations as to maritime affairs included in the civil law were derived from the same source.

Rhodes was also famous for its science and literature. Aeschines, on his retirement from Athens, opened a school of rhetoric in this city; and towards the termination of the Roman republic, and under the early emperors, Rhodes was held, as a school of eloquence, literature, and philosophy, to be little, if at all, inferior even to Athens; and these, combined with the genial temperature of the climate, and the luxurious refinement of the capital city, made it be resorted to by some of the most illustrious individuals of whom Rome has to boast, including, among others, Pompey and Cicero. Julius Caesar, too, had set out to study at Rhodes, and was only prevented by being captured on his voyage by pirates. (Suetonius, lib. i. cap. 4.) Tiberius resided for about 7 years in the island. It seems also to have been a favourite retreat of those Romans who wished to withdraw from the factions and turmoil of Rome. (Cicero, Epist. ad Fam., lib. ii. epist. 28.)

The government of Rhodes, which, like that of most other Greek cities, was originally monarchical, was subsequently changed into a democracy, and thence into an aristocracy, under which it enjoyed a degree of tranquillity and prosperity to which most Grecian cities were strangers. It was taken by Mausolus, king of Caria, but recovered its independence under his widow, the famous Artemisia. From this period Rhodes continued to enjoy profound peace, till it was attacked by Demetrius, the son of Antigonus, one of Alexander's successors. The siege of the city of Rhodes by Demetrius is one of the most celebrated in ancient history; but all the science and efforts of Demetrius were defeated by the bravery and resolution of the Rhodians, and he was compelled to raise the siege, anno 303 B.C., after it had continued about a year. The expense of the Colossus was mostly defrayed from the sums received by the Rhodians for the machines and other engines used by Demetrius in the siege, and which he gave up to them. It may be worth while to notice the fact, mentioned by Hume, that this siege affords the only example to be found in antiquity of the establishment of a cartel for the exchange of prisoners. (See Essay on the Populousness of Ancient Nations.)

The Rhodians were subsequently ranked among the steadiest of the allies of Rome; they repulsed Mithridates, who made an attack on their city, and continued to enjoy their liberty till the reign of Vespasian, when Rhodes was made a Roman province. The island was overrun by the Saracens; but having been recovered by the Eastern emperors, it was presented, in 1308, by the Emperor Emanuel, to the Knights of St. John of Jerusalem, who held it till 1522, when, after a desperate resistance, it was taken by the Turks in whose possession it has remained to the present day.

RHODEZ, or RODEZ (an. *Segodunum*), a town of France, dép. Aveyron, of which it is the cap., on a hill beside the Aveyron, 163 m. E. by S. Bordeaux. Pop. 11,856 in 1861. Rhodéz, like most other very old towns, is ill built: streets steep, narrow, dirty, and dark from the projection of the upper stories. The neighbourhood is, however, agreeable; and the town, which has rather an imposing aspect from without, is closely surrounded with gardens and planted promenades. Almost the only edifice worth notice is the cathedral, a Gothic building, constructed between the 13th and 16th centuries. Its fine tower, which, it is said, may be seen at a distance of nearly 50 m. is 266½ ft. high, square for two-thirds its height, then octagonal, ornamented with delicate tracery, surmounted with a small cupola and a colossal statue of the Virgin: it has minarets at each corner, on the summits of which are figures of the four evangelists. This church is rich in arabesques, and has a fine organ. The bishop's palace, prefecture, royal college, formerly belonging to the Jesuits, seminary, public library, with 16,000 vols., town-hall, hospital, and convent of Cordeliers, a building of the 14th century, are the other chief public edifices.

Rhodéz is a bishop's see, and has courts of primary jurisdiction and commerce, a chamber of manufactures, schools of drawing and for deaf and dumb persons; manufactures of coarse woollens for clothing troops, hats, wax candles, and playing cards; and some trade in cheese, wool, and coarse linens. It has four annual fairs. In its vicinity many mules are bred. Rhodéz was annexed to the dom. of the crown by Henry IV.

RHÔNE (an. *Rhodanus*), a celebrated river of SW. Europe, rising in the Pennine Alps, traversing portions of Switzerland and France, and falling into the Mediterranean, between lat. 43° 15' and 48° 15' N., and long. 4° and 8° 20' E. Length, 590 m.; estimated area of basin, 37,300 sq. m. The highest source of this river is on the W. side of the great mass of St. Gothard, between the Furca, Gallenstock, and Grimsel, at an elevation of 5,780 ft. above the sea; but it scarcely assumes the form of a river till its junction with three or four other streams at the foot of the glacier of its own name, a beautiful fan-shaped cluster of ice, the lower edge of which is 5,470 ft. above the sea. Its course through the Valais is WSW. as far as Martigny, about 82 m. from its source, the height of the river at this point being 1,523 ft. above the sea; but here the stream assumes a NNW. direction for about 24 m., entering the Lake of Geneva at a level of 1,236 ft. above the sea, bringing with it a deposit of mud which has partially filled all the upper part of the lake. (Lycell's Geology, i. 333, 334.) The Rhône, on leaving this lake at the town of Geneva, where it is crossed by two bridges, is soon afterwards joined by the Arve, and then enters a rocky defile between the Alps and Jura chain, taking a SW. direction for about 22 m., as far as the gorge called the *Perte au Rhône*, where its waters are

hidden by limestone rocks nearly meeting over the stream. Its course thence is nearly due S. for 40 m., as far as St. Cenis, at which point the river is still 645 ft. above the sea. Here, however, it takes a sudden turn to the WNW., which direction it maintains with few exceptions to its junction with the Saône at Lyons, the average fall from the Lake of Geneva to this city (a distance of about 120 m. along the stream) being estimated at somewhat more than 6 ft. per mile. The *Perte du Rhône* is thus described by Mr. Bakewell (Travels, iii. 265):—'The river, before arriving at *la Perte*, runs in a narrow bed, cut in soft clay strata reposing on a hard calcareous stratum; but on reaching this stratum, the waters have excavated a deep tunnel in it, into which they fall with considerable force; the rocks on each side approaching so close, that, before the space was widened by the Sardinian government, to prevent smuggling, a man might have strode across and seen the Rhône pass at a great depth between his feet. This tunnel is divided half-way down by projecting ledges of rock into an upper and lower channel. In winter and early in spring the river runs below these ledges, and is nearly concealed: in one part, also, masses of rock have fallen down, and entirely covered the lower bed of the river for about 60 yds. This part may be traversed when the river is low; but in summer, during the melting of the Alpine snows, it is much enlarged and flows over the intervening rock.' The Rhône leaves the hilly country a few miles E. of Lyons, where its deep, transparent blue, and very rapid waters are joined from the N. by the sluggish and muddy stream of the Saône: indeed, so marked is the difference between these rivers, that for many miles below Lyons, they flow side by side, the E. portion being clear and blue, the other of a muddy yellow colour. The course of the Rhône close to the city is from NNE. to SSW.: it has a medium breadth of about 650 ft., and is so liable to inundations that embankments have been formed to protect the town and its suburbs. From Lyons the united stream holds a course nearly due S. to the Mediterranean, receiving numerous streams both from the W. and E., but chiefly the latter: the Isère, a considerable river, rising on Mount Cenis, joins it between Tournon and Valence; and near Avignon (where the Rhône is 117 ft. above the sea), it is joined by the Durance, a swift and turbid stream, which collects the waters from the western face of the maritime Alps.

The Rhône enters the Mediterranean by four mouths: the first separation occurs at Arles, where two branches are formed; one called the great Rhône, running SE., the other known as the little Rhône, pursuing a SW. course, and both together enclosing the alluvial island of Camargue, which has an area of about 1,900 sq. m. Each of these again bifurcates a short distance above the mouth; but the E. channels are those only which admit of safe navigation. The Rhône, which has a very rapid course (*Rhodanus ferox*), brings down a whitish sediment, discolouring the Mediterranean to a distance of 6 or 7 m.; and there is every reason to suppose that there has been a constant, though slow, advance of the base of the delta during the last 18 centuries: indeed, Mese (an. *Mesua Collis*), stated by Pomp. Mela to be almost an island, is now far inland; and Notre Dame des Ports, a harbour in the 9th century, is now a league from the sea. The confluence of the Rhône with the currents of the Mediterranean forms bars across the mouths of the river, and by these means considerable spaces become divided off from the sea, and subsequently from the river

also, when it shifts its channels of efflux. Some of these lagoons being subject to the occasional ingress of the river when flooded, and of the sea during storms, are alternately fresh and salt. Others, after being filled from the sea, become more salt by evaporation, and are, in fact, natural salterns. The sea, opposite the mouth of the Rhone, deepens gradually from 4 to 40 fathoms within a distance of 6 or 7 m., the bottom being characterised by very curious alternations of marine and freshwater shells. (Lyell's Geology, i. 341-345.)

Among the tribs. of the Rhone, by far the most important is the Saone (an. *Arar*), which rises on the Vosges, in that mass of high land which gives origin also to the Meurthe, Moselle, and Meuse: the source is at Viomeuil, 1,300 ft. above the sea. Its course is tortuous, though generally SSW. as far as Chalons; 18 m. above which it receives on its E. bank the waters of the Doubs. This river rises at an elevation of 2,830 ft. above the sea, in one of the longitudinal valleys of the Jura mountains; and after running NNE. for about 60 m. is suddenly deflected southward by Mount Terrible, whence its course is SW., past Besançon, to its confluence with the main river. The general direction of the Saone from Chalons is S. by W., past Macon, Trevoux, &c.; and the average fall from the former place to its junction with the Rhone at Lyons scarcely exceeds 1 ft. per mile; and the channel being extremely tortuous, it has a very slow current. (*Influit incredibile lenitate, ita ut oculis, in utram partem fluat, judicari non possit.* Cæsar, lib. i. cap. 12.) Its waters are charged with marl, sand, and the debris of Jura limestone. The Isère and Durance have already been mentioned. They are extremely rapid, charged with deposit from the secondary strata flanking the main ridge of the Alps. The only considerable W. trib. is the Ardèche, rising in the Cevennes, not far from the Loire.

Owing to the rapidity of its current the Rhone was formerly of comparatively little use in navigation, the principal trade being carried on by vessels down the stream, mostly from Lyons to Beaucaire, the boats that ascended the river being usually dragged up by horses. But since the introduction of steamers, a vast impulse has been given to the navigation; the Rhone, Saone, and their greater affluents, have become important channels of intercourse; and their basins are now improving more rapidly than any other part of France. An English traveller, Mr. Maclaren, who sailed down the Saone and Rhone, from Chalons to Marseilles, describes the trip as follows (Notes on France, p. 82):—'I left Chalons at 6 a.m. and reached Lyons by the steam-boat at two, distance about 85 m. The fare was only 4½ francs. From Lyons to Avignon the fare is 30 fr., the distance about 170 m.; time about 13 or 14 hours per steam-boat. The steam-boats are English built, and worked by English engineers. They are about 100 ft. long, 25 wide, and are neat and commodious, though by no means splendid. They are very flat in the bottom, drawing only about 24 inches of water. The Rhone is full of sandbanks, which, owing to the rapidity of the current, are continually shifting, and vessels drawing a greater depth than 2 ft. cannot navigate the river with safety. The English engineer told me that his steam-boat went about 9 m. an hour in still water; the current adds about 5 m. going down, and deducts as much going up; so that she moves at the rate of 14 m. the one way, and 4 the other. The Rhone passes through one of the most beautiful, picturesque, and delightful regions in the world. It is one continued vineyard, skirted and sheltered

by mountains from 500 to 2,000 ft. in height, presenting every variety of form and aspect,—now round and smooth—now rugged and peaked—now bare and sterile—now clothed with vines or malberries, or cut into terraces, and carefully cultivated to their summits. Mount Pilatre, and others of the high Cevennes, on the W., and the Alps on the E., capped with snow, appear through openings in the lateral chains at intervals. The valley is often contracted to a space of one m.; again it spreads out in the form of a rich plain, to a breadth of 10 or 12 m. Twenty times the river appears closed in by the hills, and you are puzzled to conjecture where it escapes, till a bend in its course clears up the mystery. To the natural beauties of the country are added those which it derives from the industry and taste of its inhabitants. There is an almost unbroken line of large towns, villages, hamlets, cottages, and neat villas, along each side of the river, and not merely on its banks, but reaching back to the mountains. The glittering white walls of these buildings, surrounded by rich, well cultivated lands, give vivacity to the scene, and fill the mind with images of peace, abundance, security, and contentment. From Chalons to Marseilles the marks of progress meet the eye everywhere. The whole district, 270 m. in length, is advancing with giant strides. At every step, in descending the river, we meet with houses or manufactories building, quays forming on the river, bridges erecting, roads or towing paths, or embankments making. Two facts will show that this is no exaggeration. It is only eight years since steam-boats were introduced; and there are now six plying between Chalons and Lyons, and ten between Lyons and the sea, though the coal they use is brought from England, and costs about 50s. a ton. It is but ten years since suspension bridges were heard of in the district; yet in the short intervening space the industrious inhabs. of these districts have erected 14 suspension bridges over the Saone, and 12 over the Rhone. I doubt if there be as many at this moment in all England. And let it not be supposed that the bridges are paltry or rude and imperfect works. They are light and elegant; the arches are often of great span, and the pathway is either level or slightly and uniformly curved. Sometimes they have two arches, but in general three. The chains are sometimes single, but more commonly triple or quadruple; the suspension rods always single. The columns on the piers are sometimes slender obelisks of stone, sometimes thin tall slabs of cast iron. Taking them altogether, they are the lightest and most handsome structures I ever saw, and show great boldness as well as skill and taste, in the engineer. But the fact on which I wish to fix attention is the enterprise and the wealth which these works bespeak. The 26 bridges must have cost at least 200,000l., and this sum has been raised by the public spirit of the district, and expended on one species of improvement, while many others were in progress.'

The basin of the Rhone is connected by canals with the other principal rivers of France. The canal of the Rhone and Rhine connects the Doubs with the Ill, an affluent of the Rhine; the *Canal du Centre* unites the Saone to the Loire, and the canal of Burgundy connects the Saone with the Yonne, a navigable branch of the Seine; so that in this way the four principal rivers of France are united. The navigation of the mouth of the Rhone is considerably improved by the canal of Arles, which runs close to the Great Rhone, and by the canal of Beaucaire, which leaves the river near the town of that name, and not only runs into the Mediterranean, but is joined by branch

canals with the *Canal du Midi*, connecting the Garonne and the Bay of Biscay with the Mediterranean. The Rhone is also connected with the Loire by a railway, which passes through the important manufacturing town of St. Etienne.

RHONE, a *dép.* of France, and, next to that of the Seine, the smallest in the kingdom, though, from its containing the city of Lyons, it be among the most populous; reg. S. between lat. $45^{\circ} 28'$ and $46^{\circ} 18' N.$, and long. $4^{\circ} 20'$ and $4^{\circ} 55' E.$, having N. Saone-et-Loire, W. and S. Loire, and E. Ain and Isère, from which it is principally separated by the rivers Rhone and Saone. Length, N. to S., 55 m.; average breadth about 20 miles. Area, 279,081 hectares. Pop. 662,493 in 1861. Surface mostly mountainous, being covered with ramifications of the Cevennes. The *dép.* is well watered, but there are no navigable rivers, except the Rhone and Saone. It is estimated that it has 143,120 hectares arable land, 36,399 ditto meadows, 30,552 vineyards, and 34,466 woods. The produce of corn is far below the internal demand. The produce of wine, the chief source of agricultural wealth, is supposed to exceed 450,000 hectolitres a year. The wines produced in that portion of this *dép.* called the Beaujolais belong to the class of Macon wines. Of the other growths, probably the best is the Côte-Rôtie, a red wine raised near Ampuis. It requires to be kept in the cask for five or six years before bottling. The white wines of Condrieux are also very good. The forests produce fine chestnuts; but the quantity of timber they yield is insufficient for the demand of the important manufacturing districts round Lyons and St. Etienne. Fortunately coal is abundant. Neither horned cattle nor sheep are very numerous; but a great many goats are kept, and in some places they have been crossed with the breed of Thibet. From the milk of the goats on Mont d'Or a cheese is made which fetches a high price. The silkworm is reared in some places, but the culture of the mulberry appears to be diminishing. Rhone is rich in minerals. Besides coal, iron, copperas, argentiferous lead, barytes, manganese, and fine marbles are obtained; and in this *dép.* are the two most productive copper mines in France, those of Chessy and St. Bel.

The principal manufacture is that of silk stuffs, which is carried on upon a most extensive scale. It has been fully noticed under the art. Lyons, to which the reader is referred. The *dép.* has also manufactures of muslins at Tarare, linen and cotton thread at Thizy and other towns, and of hardware, jewellery, glass, paper, paper hangings, and chemical products. Taking into account the small extent of the *dép.*, it exhibits a much greater proportion than ordinary of the larger class of properties. Rhone is divided into two arronds., chief towns Lyons and Villefranche.

RHONE, BOUCHES DU. (See BOUCHES DU RHONE.)

RIAZAN, a gov. of European Russia, between lat. 53° and $55^{\circ} 40' N.$, and long. $38^{\circ} 20'$ and $41^{\circ} 15' E.$; having N. Vladimir, E. and S. Tambof, and W. Tula and Moscow. Area, 16,200 sq. m. Pop. 1,427,299 in 1858. Surface generally flat. The Oka, running from W. to E., divides it into two unequal portions of very different aspect. The country S. of that river is the more elevated; the air wholesome, and the soil fertile: in the N., on the contrary, the country is generally low, marshy, and covered with woods, or destitute of culture. More corn is grown than is required for home consumption, the average produce being between 5,000,000 and 6,000,000 chetwerts a year. The forests, which are very extensive, cover above a third part of the surface; those belonging to

the crown comprise about 428,000 deciatines, or 1,284,000 acres. Hops, tobacco, and garden vegetables are, in some districts, raised in large quantities. The proprietors of the pasture lands let them to graziers belonging to the Ukraine, who bring thither large herds. The breed of horses is good; the Russian gov. has a *dépôt d'étalons* at Shopine. Bees are supposed to produce about 250,000 roubles a year. There are a few iron mines and stone quarries. Manufactures have made some progress. Those of glass and hardware occupy the first rank; and there are others of woollen, cotton, and linen fabrics, cordage, potash, and soap, with dyeing establishments, tanneries, and distilleries. A portion of the manufactured goods is sent to Moscow, and by way of the Oka, down the Volga; but the principal exports are the raw products of the gov., consisting of corn, cattle, honey, lard, iron, timber, and wooden articles. The pop. is principally Russian, but partly of the Tartar stock. Riazan is subdivided into 12 districts; chief towns Riazan, the cap., Zarat'sk, and Kacimof.

RIAZAN, a town of European Russia, cap. of the above gov., on the Troubege, a tributary of the Oka, 110 m. SE. Moscow. Pop. 24,162 in 1858. The town consists of two distinct portions; an irregular fortress, with an earthen rampart, enclosing numerous churches, the episcopal palace, formerly the residence of the princes of Riazan, and the consistory; and the town proper, in which are also numerous churches, with a fine edifice for the government offices, several convents, a seminary and public library, and hospital. The town has greatly increased in size and importance within the last fifty years; but most of the houses are still of wood, and planks occupy the place of pavement in the streets. Riazan is the seat of a military governor, with authority over the gov. of Riazan and Tambof, and of the chief judicial courts of its gov. It has a gymnasium, to which a society of arts was attached in 1820; a school of drawing and architecture, founded in 1824; schools for the children of official persons, and several of the principal manufactures in the gov. The old town of Riazan, destroyed by the Tartars in 1568, is distant about 33 m. SE.

RIBEAUVILLE (Germ. *Rappolzweiler*), a town of France, *dép.* Haut-Rhin, cap. cant., at the foot of the Vosges, 7 m. N. Colmar. Pop. 7,181 in 1861. Above it are the remains of the old castle of Ribeaupierre; and in the immediate neighbourhood are some other ruined fortresses, and the principal remains of the ancient wall called the *Heidenmauer* ('wall of the Pagans'), erected at a remote period along the top of the most E. range of the Vosges. It has manufactures of calicoes and cotton handkerchiefs.

RICHMOND, a parl. and mun. bor., market town, and par. of England, the cap. of a district called Richmondshire, having a separate jurisdiction, W. div. wap. Gilling, N. riding co. York, on the declivity of a hill rising from the Swale, which half encircles the town, and is crossed here by a stone bridge; 11 m. SW. Darlington, and 41 m. NNW. York, on the North Eastern railway. Pop. of parl. bor. 5,134 in 1861. Area of parl. bor., which comprises the pars. of Richmond and Aske, 5,690 acres. The town, which is most picturesquely situated, commands, from many points, very fine views of the Swale, its bold rocky banks, and the well-wooded country around; and its appearance is made more imposing by the ruins of its castle and keep, built on a rock above the river. The streets are irregularly laid out; but a very fine broad avenue leads from the Darlington and Northallerton roads into an extensive market

place, surrounded by the principal shops and town hall. In the centre of the market square is a column, or cross, under which was formerly a reservoir for water, brought by pipes from the neighbouring hamlet of Aislebeck; but the supply being deficient, a much larger quantity has been brought from Coalsgate, and a new and larger reservoir has been constructed for its reception. The houses are mostly built of a reddish sandstone; and the town, being well paved, lighted with gas, and kept remarkably clean, has a very neat appearance. The church, built on a slope facing the river, is principally in the perpendicular style, with a fine pinnacled tower; but some portions are clearly of an older date. The Weslevans and Baptists have places of worship, and there is a large Roman Catholic chapel with an attached school. The town has a national school, attended by about 200 boys and girls, an infant school, and Sunday schools. A free grammar school, founded in 9 Elizabeth, is well endowed with property under the management of the corporation, who appoint its head-master. All natives, and the sons of residents within the bor., are admitted gratis. Another free school, for commercial purposes, is under the control of the corporation; in whose hands, also, are several charity estates, including endowments for almshouses. A scientific society and mechanics' institute have attached libraries, and there is a savings bank. There are no manufactures of importance at Richmond. Its market is a very considerable one for corn, and for the accommodation of the dealers, a new market-house, 90 ft. long, was built in 1854. The town is inhabited by many wealthy families, who, with the neighbouring gentry, cause a pretty extensive retail trade. The training of race-horses is also a considerable business; and races are held annually in October, about a mile from the town, on a high moor, which has a commodious grand stand. About 1½ m. NNW. is Aske Hall, a fine seat belonging to the Earl of Zetland; and near Catterick is Brough Hall, the residence of Sir W. Lawson.

Richmond, which received its first royal charter in 8 Edward III., and was incorporated in the 19 Eliz., is governed, under the Mun. Reform Act, by a mayor, 8 aldermen, and 12 councillors. Quarter and petty sessions for the bor. are held under a recorder, and petty sessions for the wap. of West Gilling take place on alternate weeks. A civil court for the recovery of debts under 100*l.*, another for the district of Richmondshire, and a court leet for the manor, are held occasionally; and there is a monthly ecclesiastical court, under the archdeacon of Richmond. The bor. has returned two members to the H. of C. since the 27 Eliz., the right of election down to the Reform Act being in the holders of burgage tenures. The Boundary Act enlarged the limits of the bor. by the addition of the par. of Easeby, and in 1865 it had 306 reg. electors. It is also one of the polling places at elections for the N. riding of the co. Market on Saturday; three annual chartered and other fairs.

The history of Richmond is closely associated with that of its castle, founded by Alan, the first earl of Richmond, who having received from William the Conqueror the forfeited estates of the earl of Mercia, built the castle and part of the town of Richmond, to protect his family and property. Under the Norman monarchs, the title and property were possessed by different families, allied to the blood royal; and in the contest between the houses of York and Lancaster they also several times changed possessors, till at length they were vested in the crown by the accession of Henry, earl of Richmond, to the throne, under

the title of Henry VII. Since this epoch, the castle has been allowed to fall into partial decay. It still, however, bears marks of its former grandeur and importance. The keep tower, of which the walls are nearly entire, is a Norman structure, about 100 ft. in height, the walls being 11 ft. thick; the lower story is supported by a vast column in the middle, from which spring circular arches, closing the top. The floors of the two upper rooms have fallen in; but a modern wooden staircase leads to an older flight in the walls, by which the visitor may reach its summit, which commands an extensive and beautiful view of the surrounding country. The ruins of several other parts of the castle still remain, and latterly they have been partially repaired. In the SE. corner of the area is a ruinous tower, in which is a dungeon, 13 or 14 ft. deep. The ground covered by the castle comprises nearly six acres: it belongs to the duke of Richmond and Lennox, on whose ancestors it was conferred, with the title of duke, by Charles II. Here are also the ruins of a monastery of Grey Friars, the steeple of which is a remarkably fine specimen of the perpendicular style; and at Easeby are extensive and highly interesting remains of an abbey, built in the twelfth century, for Premonstratensian monks: the buildings are chiefly in the early English style; the windows, both of the chapel and refectory, have some very elegant tracery.

RICHMOND (the Tivoli of London), a town and par. of England, upper div. hund. Kingston, co. Surrey, at the bottom and on the slope and summit of an eminence rising from the S. bank of the Thames; 10 m. W. by S. London, on the London and South Western railway. Pop. of par. 10,926 in 1861: area of par. 1,230 acres. The principal street extends the whole length of the town, running along the ridge on its W. side to the summit of the hill, and being, in the lower parts, parallel to the river. The other streets are of very inferior importance. The houses in the lower part of the town are old-fashioned, and by no means large; but on the hill and outskirts are many handsome mansions, occupied by families of distinction. The houses on the terrace, and the Star and Garter hotel, at the summit of the hill, command very extensive and noble prospects of the Thames and its rich valley, Windsor Castle being distinctly seen in the distance.

Here let us sweep
The boundless landscape.
Heavens! what a goodly prospect spreads around,
Of hills and dales, and woods and lawns, and spires,
And glittering towns and gilded streams, till all
The stretching landscape into smoke decays.

Thomson's Summer.

The church is a respectable structure, with a low embattled tower, and, till 1658, was a chapel-of-ease to Kingston, to the rector of which par. the patronage still belongs. It has been much enlarged and repaired within the last century; and contains the remains of Thomson, the poet of the 'Seasons,' who died here on the 27th of Aug. 1748; of Dr. Moore, author of 'Zeluco,' Gilbert Wakefield, the scholar; and Kean, the actor. A district church has also been erected in the pointed style. There is a Rom. Cath. chapel, and the Independents, Baptists, Wesleyan and Calvinistic Methodists have places of worship, to most of which Sunday schools are attached. A charity school, founded here in 1713, and subsequently endowed, furnishes gratuitous instruction to about 250 poor children, 60 of whom receive clothing. There are also three sets of almshouses, with considerable endowments, and numerous money charities.

Richmond is more a place of pleasure than of business, though it has a considerable retail trade for the supply of the resident families and visitors. It is a principal resort of visitors from London during the summer months, conveyed thither partly by railway and partly by steamers and row boats. On the whole, however, the influx of visitors to Richmond, at least of the middle and lower classes, has materially diminished of late years.

Richmond Park, the principal entrance to which is at the W. end of the terrace contiguous to the Star and Garter Hotel, formed by Charles I., comprises an area of 2,253 acres, being about 8 m. in circ. It consists mostly of poor soil; but has a great variety of surface, is well stocked with deer, and perfectly open to the public. The great lodge, which stands on rising ground, commanding a fine prospect, was built by Sir R. Walpole, ranger during the reigns of George I. and II., at an expense of 14,000*l*. Here, also, is a new or stone lodge, built for a hunting seat by George I., and given by George III. to Lord Sidmouth, by whom it was occupied till his death. What is called the *Old Park* extends along the Thames from Kew to Richmond, and includes the royal gardens and pleasure-grounds attached to Kew Palace. (See *Kew*.) This park is, however, inaccessible to the public, except on certain days; and is considered as belonging rather to Kew than to Richmond. The *Green*, at the bottom of the town, forms a parallelogram almost as large as Lincoln's Inn Fields; it is used in summer for playing matches at cricket: on one side of the green is a handsome public walk.

Richmond (formerly called *Sheen*) was for centuries the site of a royal palace; but at what period it was erected is uncertain, though it became a fixed residence of royalty as early as the 14th century. Henry V. rebuilt it in a magnificent style. Henry VII. held a tournament here, in 1492, soon after which, the building having been destroyed by fire, a new palace was erected by that monarch, who gave the manor its present name, being that of his own title, previously to his accession to the crown: he died here in 1509. But its principal distinction consists in the fact, that when the emperor Charles V. visited England in 1523, he was lodged in this palace. Queen Elizabeth was imprisoned in it by her sister Mary, and it afterwards became one of her favourite palaces, and here she died, on the 24th March, 1603. During the commonwealth, the palace was sold by the parliamentary commissioners for 10,783*l*.; and the whole appears to have been then dismantled and demolished, nothing now remaining except a few of the out-offices, its site being occupied by several modern mansions held on lease from the crown. On the N. side of the palace once stood a monastery, founded by Henry V., for Carthusian monks, the revenues of which, at the dissolution, were estimated at 963*l*. A Franciscan convent, founded here in 1499, by Henry VII., was suppressed with the other in 1534. The custom of Borough English, by which, in the event of the father's dying intestate, lands descend to the youngest son, or, in default of heirs male, to the youngest daughter, prevails in the manor of Richmond.

RICHMOND, a city and port of entry of the U. S. of N. America, cap. state of Virginia, on James River, about 150 m. from its mouth in Chesapeake Bay, and 105 SSW. Washington. Pop. 32,350 in 1860. The situation of Richmond is very striking. The town is built on rising grounds of various shapes, descending to the eastward. The chief street is handsome and spacious, and there

is a fine square covering about 10 acres, planted with trees, and laid out in gravel walks. In this square is the capitol, an elegant building on the model of the *Maison carrée* at Nismes, erected shortly after the war of independence. It has a statue of Washington, by Houdon. A public library has been established in the senate hall, which has also a portrait of Jefferson. Near it is the city hall, a neat Doric structure. The churches are numerous, and one occupies the site of the theatre destroyed by fire, with great loss of life, in 1811. The Virginian armoury, the penitentiary, and a new theatre, include the other chief objects of notice. The city is abundantly supplied with water from three reservoirs. Richmond is favourably situated for commerce. It stands at the head of the tide-water, in James River, and is connected by James River Canal with Buchanan, 175 m. distant, and by railways with Aquia Creek and Petersburg. It is consequently the natural *dépôt* for the wheat, hemp, and other produce of a large extent of country. Immediately above the city are some falls, beyond which the river is navigable by boats for upwards of 200 m. The falls supply valuable water power, which is used to work flour, cotton, paper, and rolling mills. Richmond has also a cannon foundry, and tobacco factories. The suburb of Manchester is connected with Richmond by two bridges; and with some coal mines, 13 m. distant, by a railway. The town gained distinction during the late civil war in the United States, when it became the seat of the central government of the so-called Confederate States. It was taken by the United States troops early in 1865, and its capture proved the signal for the end of the tremendous struggle for power between the Northern and Southern states of the great American republic.

RICKMANSWORTH, a market-town and par. of England, co. Herts, hund. Cashio, on the Gade, 18 m. NE. London. Area of par. 9,740 acres. Pop. 4,873 in 1861. The parish church has been rebuilt with the exception of the embattled tower, which belonged to the old church. The town has an endowed national school, and other minor and Sunday schools, and two almshouses. It is governed by two constables and two head-boroughs. In its vicinity are several streams, on which considerable flour and paper mills have been erected. Its trade is facilitated by the Grand Junction canal, which passes close by the town.

Moor Park, a seat of the Marquis of Westminster, in the vicinity, was once the residence of Cardinal Wolsey; but it has since been rebuilt in the modern style. The Grove, belonging to Lord Clarendon, and other seats, are also in the immediate neighbourhood.

RIGA, an important city and river port of European Russia, cap. of Livonia, on the Dwina or Duna, about 9 m. from its embouchure in the Gulf of Riga, 290 m. SW. St. Petersburg, with which it is connected by railway. Pop. 72,186 in 1860. Riga is strongly fortified. It consists of the town, properly so called, and the suburbs, the former being entirely inclosed by the fortifications. Streets in the town narrow, crooked, and houses generally brick: in the suburbs, which are much more extensive, the streets are broad and regular, and the houses mostly of wood. One of the suburbs lies on the left bank of the river, the communication with it being maintained by a floating bridge about 2,400 ft. in length. Among the public buildings are the cathedral, consecrated in 1211, and rebuilt in 1547; the church of St. Peter, built in 1406, with a tower 440 ft. in height, being the most elevated in the empire, and commanding a fine view of the city and adjacent

country; the castle, the seat of the chancellery, and of the general and civil governors; hall of the provincial states; town-house; exchange and arsenal. A magnificent column, surmounted by a colossal bronze Victory, was erected in 1817, by the mercantile body, in honour of the Emperor Alexander and the Russian army. Among the literary establishments are a gymnasium, a lyceum, a school of navigation, and various elementary schools, a public library, an observatory, and a society of Lettonian literature. Manufactures of no great importance, though, of late, materially improved. The manufactures of cotton, cloth, and rugs are the most important. There are also sugar-houses, tobacco manufactories, and breweries.

Owing to her situation on a large navigable river, Riga is the entrepôt of an extensive country; and is, in respect of foreign commerce, the next town in the Russian dominions to Petersburg. Corn used to be the principal article of export; and though its value is now surpassed by that of flax and hemp, it is still very considerable. The principal articles of export during the year 1863 with their value in British sterling, were as follows:—

| | £ | | £ |
|---------------|-----------|------------------|---------|
| Flax . . . | 1,382,325 | Oats . . . | 64,545 |
| Flax Tows . . | 5,180 | Crushing Linseed | 122,105 |
| Hemp . . . | 576,630 | Sowing Linseed | 296,970 |
| Hemp Tows . . | 5,655 | Tobacco . . . | 22,365 |
| Hemp Seed . . | 10,050 | Wood . . . | 277,120 |
| Rye . . . | 22,110 | Miscellaneous . | 478,990 |
| Barley . . . | 88,625 | | |

The countries to which shipments of these articles were made, and the value of the merchandise shipped to them in 1863, were as follows:—

| | £ | | £ |
|-----------------|-----------|------------------|---------|
| Great Britain . | 1,812,705 | Sweden & Norway | 233,610 |
| France . . . | 215,970 | Spain & Portugal | 115,162 |
| Belgium . . . | 190,175 | Hanse Towns . . | 146,462 |
| Holland . . . | 394,650 | Other Countries | 129,690 |
| Denmark . . . | 101,126 | | |

The total amount of British and Foreign shipping at this port during the year 1863, was as follows:—

| Nations | Entries | | Clearances | |
|--------------------------------|---------|---------|------------|---------|
| | Vessels | Tons | Vessels | Tons |
| British . . . | 363 | 74,345 | 363 | 74,345 |
| Russian . . . | 248 | 46,750 | 266 | 50,200 |
| Hanoverian . . | 228 | 27,120 | 228 | 27,120 |
| Norwegian and Swedish . . . | 198 | 23,400 | 198 | 23,400 |
| Dutch . . . | 165 | 22,570 | 165 | 22,570 |
| Mecklenburg . . | 129 | 22,850 | 128 | 22,850 |
| Prussian . . . | 115 | 22,180 | 115 | 22,180 |
| Danish . . . | 105 | 10,600 | 105 | 10,600 |
| Oldenburg . . . | 88 | 11,180 | 88 | 11,180 |
| French . . . | 52 | 13,000 | 52 | 13,000 |
| Lubeck . . . | 46 | 7,220 | 46 | 7,220 |
| Belgian . . . | 4 | 1,100 | 4 | 1,100 |
| Bremen . . . | 2 | 670 | 2 | 670 |
| Portuguese . . . | 2 | 400 | 2 | 400 |
| Total . . . | 1,744 | 283,385 | 1,762 | 286,785 |

The imports consist principally of sugar and other colonial products, dye-stuffs, wines, cotton, cotton-stuffs, and cotton-yarn. There is a bar at the mouth of the river which has usually from 12 to 13 ft. water; and it is customary for vessels drawing more than this to load and unload the whole or a part of their cargoes at Bolderaa, a small port outside the bar. The entrance to the river at Dunamunde, is guarded by a fort, where is also the custom-house. Riga has increased very rapidly. Under Catherine II., its pop. did

not exceed 20,000; in 1824 it amounted to 39,908; and in 1835 to 57,338. It has occasionally suffered considerably from inundations.

RIMINI (an. *Ariminum*), a city of Italy, prov. Forlì, between the rivers Marecchia (an. *Ariminus*), and Ansa (an. *Aprusa*), within about 2 m. of the embouchure of the former in the Adriatic, 28½ m. ESE. Forlì, and about the same distance SE. Ravenna, on the railway from Bologna to Ancona. Pop. 16,850 in 1862. The city is walled, and entered by several gates. A long street traverses it, terminating on the N. at the *Porta di San Giuliano*, whence emerges the *Æmilian way*, leading to Piacenza; and on the S. at the *Porta Romana*, where ends the *Flaminian way*, conducting thither from Rome. The town is well built, having some good streets and handsome marble palaces; but, like most other Italian cities, it has a dull, melancholy, and deserted appearance. The cathedral, said to have been built on the ruins of a temple of Castor and Pollux, was restored and altered by Alberti in the 15th century, and has a very elegant exterior, to which, however, the interior offers a lamentable contrast. In it are some tombs of the Malatesta family, once lords of Rimini. The church of San Giuliano has a fine altar-piece by Paul Veronese, and several good paintings by Guido, and other masters; in that of St. Augustin is a ceiling handsomely painted in fresco. It has a handsome town-house, theatre, a bowling green, and a good fish market; and in the Gambalunga palace is an extensive library, liberally thrown open to the public. The castle built here by Sigismund I. is falling into decay. The principal square is embellished with a fountain and a statue of Pope Paul V.; and in another of the open spaces is a small platform, or pedestal of a column, which, according to an apocryphal tradition, was the *suggestum* on which Cæsar harangued his troops after passing the Rubicon! At the S. entrance of the city is a triumphal arch, raised in honour of Augustus, and in most respects worthy of admiration; it was surmounted in the middle ages by a Gothic battlement. Both rivers are crossed by solid bridges; that over the Marecchia appears, from the inscriptions, to have been commenced by Augustus, and finished by Tiberius. It is of marble, 220 ft. in length, and has five arches. Critics differ as to its merit as a work of art; but being still in excellent preservation, there can be no difference of opinion as to the solidity of its construction. Without the walls are the traces of an amphitheatre, and other remains of antiquity. The port of Rimini, on the Adriatic, at the mouth of the Marecchia, is so much obstructed by sand, as to admit small vessels only. Rimini has manufactures of silk, glass, and earthenware; and the surrounding country being very fruitful, it has a considerable trade in corn, and furnishes quantities of fish to the neighbouring towns.

In antiquity Ariminum was of far more importance than at present. It was the first considerable town on the E. coast of the peninsula, after crossing the Rubicon (the boundary between Cisalpine Gaul and Italy, properly so called), and was regarded as one of the bulwarks of the latter. A Roman colony was planted in it *anno u.c.* 485, and at a subsequent period it received another colony. It was occupied by Cæsar immediately after he had crossed the Rubicon, and was honoured with the especial patronage of Augustus. It was given by Pepin, with the rest of Romagna, to the Holy See, to which, with few intermissions, it belonged till 1860, when it came to form part of the new kingdom of Italy.

RIO DE JANEIRO, or simply Rio, a city and sea-port of Brazil, of which it is the cap., and the largest and most important commercial city of S. America, on the W. side of one of the finest bays in the world, 80 m. W. Cape Frio; lat. (light-house, in Fort Sta. Cruz) $22^{\circ} 54' S.$, long. $43^{\circ} 7' 15'' W.$ Pop. 195,300 in 1863, of whom about half are whites, and the rest mostly negro slaves. The city, which is in the shape of a parallelogram, is situated on level ground, at the foot of hills, and has a fine appearance from the bay. The older portion, or that adjoining the sea, is divided on the W. from what may be called the new town by a large open space, the Campo da Honra. The style of architecture is in general mean, resembling that of the older parts of Lisbon; and though great improvements have been effected since the emigration of the court of Portugal to Rio in 1807, a great deal remains to be done before it be entitled to rank even with a second-rate European town. The streets, which are mostly straight, and intersect each other at right angles, are pretty generally furnished with *trottoirs*, and paved with blocks of granite. But, though many of them have been widened of late years, and otherwise improved, they are still, for the most part, narrow and dirty, with a water-course in the centre, the usual receptacle of the filth from the houses. The houses, which are mostly of granite, or of granite and wood, are seldom more than two stories in height, rough, or whitewashed, with red tile roofs. They are narrow, but deep in proportion to the height, the lower story is commonly occupied by the shop or workhouse, and, in the houses of people of distinction, by the stable and coach-house; the second story (and third, if there be one) comprising the family apartments. The mildness of the climate, which is here a perpetual spring, rendering artificial heat unnecessary, there are no fire-places except in the kitchens, and, consequently, very few chimneys, which, to a stranger from Europe, gives the city a bald and, as it were, a truncated appearance. The windows in the second story generally open upon iron verandas, the *jalousies* having been removed by order of government. In the outskirts of the town the streets are unpaved, and the houses of only one floor, low, mean, and dirty, with doors and windows of lattice-work, opening outwards to the annoyance of the passengers. Inside the houses it is usual for all the apartments on the same floor to communicate above the partitions, which do not extend to the ceiling. This, though it destroys privacy, is advantageous, by allowing that free circulation of air.

There are numerous churches in the city, but none of them can be called fine buildings, or are worth the notice of travellers from Europe. The cathedral, or church of Nossa Senhora da Gloria, on a lofty hill, on the S. side of the city, is a conspicuous object from a distance, and especially from the bay. There are several conventual establishments; a *misericórdia*, with an attached hospital; a foundling hospital; an institution where female orphans, born of white married parents, are educated and portioned off in marriage, with other charitable institutions.

Water is conveyed into the city from a neighbouring lofty hill (2,308 ft.), called the Corcovado, by a magnificent aqueduct, constructed in 1740. The water is thence conveyed to public fountains in different parts of the city, and a good many persons earn a livelihood by carrying water from these fountains to private families. The town is very indifferently lighted. There are but few inns and hotels, and those mostly very inferior: they

are wholly for the accommodation of strangers, being rarely visited by the townspeople. The royal palace forms two sides of a *largo*, or oblong space, opening to the bay near the principal landing-place. It consists partly of the old palace of the viceroys, and partly of a convent formerly belonging to the Carmelites, and is wholly destitute of architectural beauty. Among the other public buildings may be specified a new and handsome theatre, the exchange, the old college of the Jesuits, and the episcopal palace and royal villa of Christovao, in the environs.

The principal banking establishment at Rio is the Bank of Brazil, instituted by the government, on the model of the Bank of France. The capital of the bank is 33,000,000 milreis, in 165,000 shares of 200 milreis each, or 4,133,333 $\frac{1}{2}$ *ls.* 8 *d.*, with the right of emission of notes to treble the amount of its capital. The bank is bound to redeem the government treasury notes in circulation in the empire, at one time to the amount of 56,000,000 milr., to the extent of 2,000,000,000 milr. per ann.

Neither education nor literature are in a very flourishing state. There are, however, sundry lyceums and grammar schools, and a great many private licensed academies. Among the principal educational institutions may be specified a school of surgery, military and commercial academies, an academy of arts, and a national museum. In the vicinity is a very good botanic garden, comprising about four acres, including, among other exotics, numerous specimens of the tea plant. Near the imperial palace is the public library, containing from 50,000 to 70,000 vols. The police and health of the city have been materially improved within the last dozen years. The market-place consists of a collection of booths, for the sale of vegetables, which are at once abundant, excellent, and cheap. The *farina* of the *Jatropha Manihot* is here the grand substitute for bread stuffs, and is extensively used, forming, with bananas, the principal food of the negroes.

Commerce.—The trade of Rio is very extensive, and has increased rapidly during the last few years. It is now by far the greatest mart for the export of coffee. The following table shows the quantity and values of the exports of the port of Rio de Janeiro during 1862–63:—

| Articles | Quantity | Values | |
|----------------------------------|----------------------|------------|-------|
| | | Milreis | Dols. |
| Coffee . . . arrobas | 6,891,872 | 45,324,110 | 000 |
| Diamonds . . . oitavas | 6,970 | 2,468,725 | 400 |
| Cotton Wool . . . arrobas | 6,008 | 58,351 | 920 |
| Flour, Man- dioca } alquieras | 26,910 | 24,533 | 880 |
| Gold Dust . . . oitavas | 10,807 $\frac{1}{2}$ | 38,944 | 500 |
| " in Bars . . . " | 187,177 | 737,232 | 800 |
| Honey . . . lbs. | 521,080 | 25,954 | 000 |
| Hides, Dry . . . " | 430,389 | 112,317 | 450 |
| " Salted . . . nos. | 42,636 | 340,638 | 000 |
| Ipecacuanha . . . lbs. | 42,048 | 84,096 | 000 |
| Rum . . . galls. | 806,689 | 242,209 | 960 |
| Rosewood, Logs . . . doz. | 987 | 439,115 | 016 |
| Sugar, White . . . arrobas | 47,244 | 173,701 | 430 |
| " Brown . . . " | 401,541 | 1,003,854 | 860 |
| Starch . . . lbs. | 306,069 | 15,303 | 450 |
| Silver, in Bars . . . oitavas | 11,874 | 2,772 | 300 |
| Sweetmeats . . . lbs. | 114,112 | 39,204 | 120 |
| Tobacco, Roll . . . arrobas | 91,314 | 688,706 | 709 |
| " Leaf . . . " | 11,129 | 126,725 | 100 |
| Tapioca . . . " | 54,116 | 108,232 | 000 |
| Miscellaneous . . . " | .. | 755,927 | 319 |
| Total Exports . . . | .. | 52,810,706 | 214 |

The total, at an exchange, 27 *d.* per milrei, is equal to £5,899,537 $\frac{1}{2}$ *ls.* 7 *d.*

The subjoined table shows the countries to which the above were exported in 1862–63:

| Countries | Total Values | |
|-------------------------------|--------------|-------|
| | Reis. | Dols. |
| Great Britain and Possessions | 9,194,203 | 688 |
| Channel—Ports not designated | 12,181,822 | 912 |
| France and Possessions | 10,333,520 | 652 |
| United States | 9,696,039 | 860 |
| Portugal and Possessions | 1,734,966 | 743 |
| River Plate States | 1,611,929 | 642 |
| Sweden and Norway | 1,913,512 | 400 |
| Hanseatic Towns | 1,408,765 | 970 |
| Russia | 591,557 | 070 |
| Italy | 339,256 | 430 |
| “ Mediterranean for orders | 701,738 | 000 |
| Denmark | 912,734 | 400 |
| Belgium | 945,497 | 950 |
| Austria | 374,395 | 650 |
| Spain | 220,453 | 700 |
| Turkey | 366,668 | 000 |
| Chili | 85,180 | 100 |
| Mexico | 135,800 | 000 |
| Sundry Ports not specified | 62,663 | 047 |
| Total Value exported | 52,810,706 | 214 |

At an exchange of 20*d.* per reis, equal to £5,899,537 15*s.* 7*d.*

The principal article of import consists of cotton goods, the value of which amounts to full one-third of the total value of the imports. Next to cottons are woollen, linen, and silk manufactures, wines, jewellery, and ironmongery: flour, meat, fish, butter, and other articles of provision; spirits, salt, earthenware, paper, and a host of other articles.

Harbour.—The harbour of Rio is one of the finest in the world. Its entrance is marked by a remarkable hill, in the form of a sugar loaf, 900 ft. in height, close to its W. side; while on the opposite side of the bay, at the distance of about 1½ m., is the fort of Santa Cruz, on which is a light-house. There is, also, a light-house, having the lantern elevated about 300 ft. above the sea level, on *Ilha Raza* (Flat Island), about 10 m. S. from the mouth of the harbour. Ships may enter either by night or day, there being no obstruction or danger of any kind. The water in the bay is sufficient to float the largest ships of war; and it is extensive enough to accommodate the navies of all the countries in the world.

RIOM (an. *Ricomagus*), a town of France, dép. Puy-de-Dôme, cap. arrond., on a hill, 8 m. N. by E. Clermont. Pop. 10,863 in 1861. The town is well built; but the houses are mostly in an antiquated style, and being wholly constructed of Volvic lava, with which it is also paved, it has a singularly sombre appearance. It has several handsome public fountains, and its churches, hospitals, the various public offices, and the sub-prefecture, are good buildings. One of its promenades is ornamented with a statue of Desaix. Riom is the seat of a royal court for the dép. Puy-de-Dôme, Allier, Cantal, and Haut-Loire; and of tribunals of primary jurisdiction and commerce. It produces cotton and linen cloths, candles, leather, and brandy; and has a large trade in agricultural produce. It was formerly the cap. of Auvergne, and the residence of its dukes, some remains of whose castle still exist; and it continues to rank as the second town within the ancient limits of that province. Among the distinguished individuals belonging to Riom may be specified Gregory of Tours, and the learned Jesuits J. and A. Sirmond.

RIPON, a city, parl. and mun. bor. and market town of England, N. riding co. York, lower div. wap. Claro, on the Ure, close to its confluence with the Skill, 22 m. NW. York, and 222 m. NWN. London by Great Northern railway. Pop.

of parl. bor. (which comprises the township of Ripon with part of the district of Bondgate), 6,172 in 1861. The appearance of Ripon is that of a very respectable and wealthy country town. The streets are irregularly laid out, but clean, and well lighted with gas, many of them meeting in the market place, a spacious square surrounded with good shops, having in its centre an obelisk 90 ft. in height, surmounted by the city arms, and on its S. side a particularly handsome town-hall, comprising courts, offices, and a handsome room for balls and public meetings. Ripon minster, erected in 1836 into a cathedral, and built in the 14th and 15th centuries, is one of the best proportioned churches in England. It is a cruciform structure, with a tower rising from the intersection of the nave and transepts, besides two others (each 110 ft. in height) at the W. end. Its length, from E. to W., is 266 ft.; breadth of choir and aisles, 67 ft.; and length of transepts, 132 ft. 'This venerable edifice,' says Mr. Britton, 'contains various parts worthy of attention, particularly its W. front, a very fine specimen of bold early English, and, except the battlements and pinnacles, without alteration. A part of the church is Norman, and a great portion of the transepts but little later. The choir is partly decorated; and S. of it is a Norman crypt, above which are some Norman buildings used as vestries. At the E. end of the choir, which is sadly disfigured by heavy modern galleries, is a decorated E. window of five lights with very elegant tracery. The nave is very light, exhibiting some extremely fine composition; and there is a considerable quantity of good screen-work, both in wood and stone.' The chapter comprises a dean, subdean, and six canons, who divide among them a net revenue of 683*l.* Ripon was erected into a bishopric in 1838, the diocese comprising most of the populous parts of the W. riding, with the liberty of Richmondshire in the N. riding. The annual revenue of the see is 4,500*l.*, chiefly derived from the surplus fund formed out of the deductions from the revenues of the larger sees. Trinity church, built and endowed in 1826 at a cost of above 18,000*l.*, is a Gothic cruciform structure, with lancet windows, and has accommodation for upwards of 1,000 persons. The Wesleyan Methodists have two places of worship, and there is one each for Independents and Primitive Methodists. The town has several Sunday schools, besides which there are national schools both for boys and girls, and an endowed blue-coat school. A grammar school, founded in 1555, has an endowment producing about 870*l.* a year: it is free, for Latin, Greek, and English grammar, to the sons of all residents, besides whom the master may receive boarders and pay-scholars. The town has several almshouses and money-charities, and a dispensary furnishes relief to the sick poor. A mechanics' institute, subscription library, and news-room are comprised in 'the public rooms,' a large and rather handsome building, erected by subscription, having attached gardens and pleasure-grounds. A theatre was built in 1792, but it has been converted into a dépôt and riding-school for the York yeomanry cavalry.

Ripon was formerly celebrated for its manufacture of spurs, and the expression 'as true steel as Ripon rowels,' was once proverbial for men of integrity and intrepidity. It had also a considerable manufacture of woollen-cloth; but both these branches of industry have long ceased to exist. Linen-weaving, malting, and tanning are pursued to some extent; and, as seen above, saddle-trees and saddlery are made in pretty large quantities. It is a large staple for wool, bought up here by the

clothiers of Leeds and Halifax; and it has an excellent corn-market. In 1767, the Ure navigation was brought up to the town, which is thus rendered accessible by barges of 30 tons.

Ripon is a bor. by prescription, but received a charter from James I. Under the Mun. Reform Act it is governed by a mayor, 3 aldermen, and 12 councillors. The bor. has a commission of the peace under a recorder; a county court, before which 448 complaints were entered in 1848; and a separate manor-court held by the dean and chapter, having jurisdiction over the district, called 'canon fee.' Ripon has sent 2 mems. to the H. of C. since the reign of Edward VI., the right of election being, previously to the Reform Act, in the holders of burghage tenures, all of which had, for many years, been in the possession of a single individual. The limits of the par. bor., as fixed by the Boundary Act, comprise the entire township of Ripon with a part of the township of Aismunderby-cum-Bondgate. Reg. electors, 353 in 1865. Large markets on Thursday, abounding with all kinds of agricultural produce, and six yearly fairs.

Ripon derives its name from its position in *ripa* of the river Ure, but whether of Roman or Saxon foundation is wholly unknown. A monastery, founded here A.D. 661, attained considerable celebrity; it was, however, destroyed by the Scotch in the reign of Edward II., and was not afterwards restored.

RIVE-DE-GIER, a rapidly increasing town of France, dép. Loire, cap. cant. on the Gier, a tributary of the Rhone, at the head of the canal of Givors, and on the railway from St. Etienne to Lyons; 12 m. NE. the former, and 30 m. SW. the latter. Pop. 14,202 in 1861. The town was formerly fortified, but its works have been destroyed, and it is now principally remarkable for its commercial activity, sharing largely in the growing prosperity of the country along the Rhone, and the districts round Lyons and St. Etienne. It has extensive manufactures of glass wares; and its coal-mines furnish a large proportion of the coal required in the hardware factories of St. Etienne. It has also hardware manufactures of its own. The offices of the Givors Canal Company, and the noble reservoir belonging to that canal, are the most remarkable public works at Rive-de-Gier.

ROANNE (supposed to be the *Rodumna* of Ptolemy), a town of France, dép. Loire, cap. arrond., on the Loire, here crossed by a new bridge, 30 m. N. Montbrison, on the railway from Lyons to Moulins. Pop. 17,268 in 1861. Roanne is a pretty, well-built, open, straggling town, with a good quay, a large hospital, a handsome theatre, and a communal college, having a good library and cabinet of natural history. It is the seat of a tribunal of original jurisdiction, and a chamber of manufactures; and is a dépôt for the manufactures of Lyons and the SE. of France, passing to the central and NW. déps. It also manufactures muslins, calicoes, and woollen fabrics; and has some trade in corn, wine, flour, timber, and charcoal. Various remains of antiquities have been discovered in and near the town.

ROCHDALE, a par. bor., market town, and par. of England, middle div., hund. Salford, co. Lancaster, on the Roch, trib. of the Irwell; 11 m. NNE. Manchester, 37 m. ENE. Liverpool, and 200 m. NW. London by Lancashire and Yorkshire railway. Pop. of par. bor. (which comprises all within the limits of a circle described with a radius of $\frac{3}{4}$ m. from the town-hall), 38,184 in 1861. The town consists of several streets, greatly improved of late years: the principal thoroughfare, in which

are the market-house and town-hall, being wide and lined with brick houses. The streets generally are well paved, lighted with gas, and well supplied with water from four reservoirs in the township of Wardleworth. Here are two assembly-rooms, a small theatre, a commodious gaol, and workhouses. The parish church, a structure of Norman and early English architecture, with a square pinnacled tower, stands on an eminence, to which there is an ascent from the lower part of the town by a flight of 126 steps: the living is a vicarage, of the annual value of 1,730*l.*, in the gift of the Archbishop of Canterbury. The town has six other churches, and numerous places of worship for different denominations of dissenters, among whom Methodists, Independents, and Baptists are the prevailing bodies. Each church and chapel has a Sunday school, attended by great numbers of children. The town has a large national school, another well-endowed establishment, called the *Moss school*, for the gratuitous education of 40 boys and 20 girls; a free grammar school, founded in 1564, and attended by about 45 boys; an endowed girls' school, and numerous moneyed charities. A dispensary and ladies' charity furnish relief to the sick poor; besides which there are Bible, tract, and other religious associations, a literary society, an horticultural society, and a savings' bank.

Rochdale is a principal seat of the woollen and cotton manufactures, especially the former: the woollen articles produced here consist principally of baizes, flannels, and kerseys; and those of cotton, of strong calicoes, fustians, and similar articles. About 10,000 hands are employed in the cotton factories and print works, and 6,000 in the baize, flannel, and other woollen factories. There are also numerous hand-loom weavers, though power-looms have been extensively introduced within the last few years. Hat-making is pursued on a considerable scale, and numerous hands are employed in the town and neighbourhood in making machinery. Coal and stone abound in the neighbourhood, and the par. comprises 10 collieries. Iron ore has been found in considerable quantities in Butterworth township, and flags are quarried at Spotland. Rochdale has means of communication with Manchester and Liverpool westward, and with Halifax, Leeds, and other towns, eastward, both by canal and railway. The Rochdale Canal, which passes near the town, uniting westward with the Duke of Bridgewater's Canal, and eastward with the Calder and Ribble Navigation, 33 m. in length, cost upwards of 600,000*l.*, and is supplied, at its summit-level, by large reservoirs, one of which covers 130 acres. It was opened in 1804, and the daily traffic may amount to 1,400 tons. The Manchester and Leeds railway passes through the district; and in Calderbrook township is a tunnel 2,860 yards long, chiefly cut through the solid rock, 80 ft. below the surface.

Notwithstanding its pop. and manufacturing importance, Rochdale had no representative in the legislature till the passing of the Reform Act, which conferred on it the privilege of sending 1 mem. to the H. of C., the electoral limits being defined, as above stated, in the local act of 6 Geo. IV., c. 101. Reg. electors, 1,416 in 1865. It is also a polling-place for the S. div. of Lancashire. The town is under the jurisdiction of the co. magistrates, and has a county-court. Markets on Monday and Saturday: fairs, May 14, Whit Tuesday, and Nov. 7, for horses and cattle.

ROCHEFORT, a maritime town, and the third naval port of France, dép. Charente-Inférieure, on the Charente, about 12 m. (by water) from its mouth, opposite the Isle of Oleron, and 10 m. SSE.

La Rochelle, with which it is connected by railway. Pop. 70,285 in 1861. The city is situated at the extremity of an extensive plain, and is shaped like a bow, the arc formed by the ramparts, and the chord by the river. The town, which is wholly of modern date, having been founded under Louis XIV., is well laid out and built, though the houses want elevation. Some of the principal streets are planted with double rows of poplars; and in the centre of the town is the *Place d'Armes*, a large and regular square, planted, and ornamented with a fountain, which, with other fountains, provide the inhabs. with an abundant supply of river water. The port is capacious, and deep enough to receive vessels of the largest size, having 20 ft. water at low ebb, and more than 40 ft. at high tide. The mercantile harbour, separated from the port militaire, admits vessels of from 800 to 900 tons. The naval yard is entered by the *Porte de Soleil*, a handsome gateway constructed in 1828, on either side of which are lodges for the guard, the agents for the surveillance of the port and officers of the customs. It comprises building-docks for ships of from 60 to 120 guns; sawing, brass and copper mills impelled by steam; a sail-loft, model workshop, a *bagne*, or prison, capable of accommodating 1,000 convicts; a rope-house, in which cables upwards of 400 yards in length are made, and a naval and military arsenal, biscuit manufactory, and stores for materials of every kind necessary in the fitting-out of ships of war. The cables and ship-biscuit made at this port are admitted to be the best in France. The naval hospital without the town comprises 9 separate buildings, furnishing accommodation for 1,200 patients. The residence of the naval commandant is a fine building, surrounded by gardens, which are open to the public. Rochefort is the seat of a maritime prefecture, and tribunals of original jurisdiction and commerce, and has schools of naval gunnery, hydrography (2d class), medicine, drawing, and music; a society of arts and literature, Bible society, and public library. It has a few vinegar factories and sugar refineries; but ship-building is by far the most important branch of industry, and the ship-builders of the mercantile port construct handsome vessels for the coasting trade and cod fisheries. The little trade otherwise enjoyed by Rochefort is principally in corn, wines, salt, and brandy. The town was formerly very unhealthy, but it has been greatly improved by the drainage of the adjacent country.

ROCHELLE (LA), a town and sea-port of France, *dép.* Charente-Inférieure, of which it is the cap., on the Atlantic, 76 m. S. by E. Nantes, and 93 m. NNW. Bordeaux, with which and Paris it is connected by railway. Pop. 18,904 in 1861. Rochelle has an admirable commercial position. The town forms, as it were, the bottom of a small gulf, which serves as an *avant port*. It is defended by 2 handsome towers, which, whether La Rochelle be approached by land or water, are seen at a distance. Opposite the town, at the extremity of the roadstead, are the Isles of Ré and Oleron. The harbour is safe and commodious; it is protected by a strong jetty, and is capable of receiving vessels of 400 or 500 tons burden. There has been created a dock, or *arrière port*, where vessels are careened. The streets are wide and straight, and have foot-pavements, mostly under arcades, on which the houses are built. Few of the private buildings are lofty or of much size; but the town has, notwithstanding, a striking appearance. The fortifications, constructed by Vauban, consist of ramparts, with 19 bastions and 8 lunettes, the whole enclosed with ditches and a covered way. The town is entered by 7 gates, one of which, the

Porte d'Horloge, is a handsome structure, apparently of the 16th century. There are several good squares, and without the walls are the promenades called the Mall and the Champ de Mars. The cathedral, town-hall, courts of justice, hospital, orphan-asylum, exchange, and a good bathing establishment, are the principal public buildings, though several more are worth notice. La Rochelle is the cap. of the 12th military division of France, which comprises the *déps.* Charente-Inférieure, Deux Sèvres, and Vendée; the seat of a bishop, of courts of primary jurisdiction and commerce, of a royal academy of arts and sciences, and the residence of several foreign consuls. It has a seminary and communal college, schools of navigation and design, a public library of 20,000 vols., botanic garden, several prisons, a mint, and a royal arsenal and foundry. Its trade is extensive, not only in wines and brandies, but in wood, iron, salt, cheese, butter, oil, sardines, and colonial produce.

La Rochelle appears to owe its origin to a castle constructed here to check the incursions of the Normans. It was for some time in the possession of the English, from whom it was taken by the French in 1224. During the religious wars, and especially after the massacre of St. Bartholomew, it was a stronghold of the Protestants. It was invested by the Catholic forces in 1572, and withstood a long siege, terminated by a treaty. The numerous infractions of that treaty in the reign of Louis XIII., and under the ministry of Richelieu, led to a second siege, which commenced in August, 1627, and which was as violent, and longer and more decisive than the former. The king, the Duke of Orleans, Marshal Bassompierre, and all the most renowned generals of the time, were present at the siege. The circumvallation extended for 3 leagues round the town; but the sea being open, English vessels poured in provisions and ammunition. After 6 months of heroic resistance, the famous engineer, Metezeau, was directed to bar the entrance of the harbour by an immense dyke, extending 1,500 metres into the sea, and of which the remains are still visible at low water. The result was soon fatally apparent. Famine quickly decimated the ranks of the besieged, and, after a siege of 14 months and 18 days, La Rochelle was compelled to capitulate. Richelieu made a triumphal entry into the city; the fortifications were demolished, and the Protestants deprived of their last place of refuge.

ROCHESTER, a city, parl. and mun. bor., and market town of England, co. Kent, *lathe* Aylesford, at the W. end of and adjoining Chatham, on the S. bank of the Medway, crossed here by a handsome stone bridge of 11 arches; 25 m. W. by N. Canterbury, 28 m. E. by S. London by road, and 30 m. by North Kent railway. Pop. of parl. bor. (which includes with the old bor. additional portions of the par. of Stroud), 16,862 in 1861. The bridge over the Medway connects the town with Stroud, on the opposite bank of the river; so that the three towns of Chatham, Rochester, and Stroud form, as it were, a continuous street, upwards of 2 m. in length, along the road from London to Dover. The houses in Rochester generally have a somewhat antiquated appearance, and among them are several built chiefly of timber, with projecting gables and stories. The town is partially paved, and lighted with gas. Fortifications were erected for its protection in 1802; but Fort Pitt is now used as a military hospital, and Fort Clarence has become a lunatic asylum for soldiers. The town-hall, a spacious brick edifice, fronted by Doric columns, is open underneath, and above is a large hall with several portraits of public

characters: at the back is a small bor. gaol. On the site of the former guildhall is the clock-house, a neat building erected in 1706, at the expense of the celebrated admiral Sir Cloudesley Shovel. A theatre is occasionally opened; there are also assembly rooms and baths, and a record room at the end of the bridge. At the SW. angle of the town, rising abruptly from the river, is the castle, anciently a strong fortress, but which has, for a lengthened period, been in a state of decay. The walls, which are of Kentish ragstone, enclose a quadrangular area of nearly 300 sq. ft., and, with their towers, are now in ruins. The walls of the keep, however, at the SE. angle of the court, are in good preservation: it rises about 104 ft. from the ground, and has turrets at the angles rising 12 ft. above the rest of the building. The style of the whole building is Norman, and it presents a fine specimen of the modes adopted at the date of its erection to enable a very small number within the castle successfully to resist a much greater number of besiegers; for which purpose, indeed, the access, the various successive gates, and other defences, are admirably calculated. The masonry in the interior is very good, especially that of the well, which is in one of the walls, and was accessible from several floors of the castle.

A little E. of the castle is the cathedral, originally founded by Ethelbert, about A.D. 600; but the present building was principally erected in the 12th century, from the plans of Bishop Gundulph, one of the first church architects of his day. It is a cruciform structure, with a central tower, of modern erection, rising from the intersection of the nave and transepts, with another, now unroofed, called Gundulph's Tower, on the N. side, close to the E. transept. According to Britton, the dimensions of the church are as follows: total inside length, 306 ft., of which 156 ft. belong to the choir; breadth of nave and aisles, 66 ft.; length of the great and small transepts, 122 ft. and 90 ft. respectively; extent of W. front, 81 ft. The exterior appearance of the cathedral is not very imposing, and the exterior walls of the nave are either much decayed or covered by modern repairs. The other parts of the church are surrounded by buildings, so that little more than one portion can be seen at a time. The W. front is a fine specimen of Norman enrichment, but has a very large inserted perpendicular W. window. The nave has Norman piers and arches, except those next the cross, which, with most of the E. portions of the church, are early English. There are other Norman portions on the other side, which appear to be the remains of the cloisters and other monastic adjuncts. The crypt is very spacious, extending under the whole choir: its character is early English; but a portion under the N. aisle may be considered almost Norman. There are a few monuments, but they are more remarkable for singularity than beauty. The whole cathedral, except the nave and S. aisle of the chancel, is adorned with early English groining; and, as at Canterbury, the floor of the choir is considerably raised above that of the nave. The ecclesiastical corporation comprises a dean and 6 prebendaries. The see of Rochester is worth 4,000*l.* a year. The town has 2 par. churches, one of which, St. Margaret's, is of very mixed architecture, and the other, St. Nicholas, in the perpendicular style: the living of the former is in the gift of the dean and chapter, and of the latter in that of the bishop. The Wesleyan Methodists, Independents, Unitarians, and the Society of Friends have places of worship, and the Sunday schools within the bor. are attended by above 800 children. A grammar school, founded in 1542, having 6 exhibitions at

Oxford and Cambridge, is supported by the dean and chapter, besides which there is an endowed mathematical school, established in 1701. Two national schools give instruction to about 500 children, and there are two or three almshouses, with smaller money charities.

The bor. of Rochester, first incorporated in the reign of Henry II., is divided, under the Municipal Reform Act, into 3 wards, and is governed by a mayor, 5 aldermen, and 18 councillors. It has a commission of the peace under a recorder, and petty sessions are held twice a week; it has, also, a county court. Rochester has returned 2 mems. to the H. of C. since 26 Edward I., the right of election down to the Reform Act being in the freemen not receiving alms. The electoral limits were enlarged, as above mentioned, by the Boundary Act. Reg. electors, 1,599 in 1865. Corn markets on Tuesday, and for provisions generally on Friday.

The only event of any importance connected with the modern history of Rochester is the descent made by the Dutch in 1667. See CHATHAM.

ROCHESTER, a city of the U. States, New York, on the Genesee river, 7 m. S. from its embouchure in Lake Ontario, at the point where the Erie canal is carried over it by a splendid aqueduct, 260 m. NW. New York. Pop. 50,720 in 1860. Rochester is one of the most remarkable even of the American towns for the rapidity of its growth. Its pop. which, in 1820, amounted to only 1,502, had increased, in 1830, to 9,269; in 1840, to 20,191; and, in 1850, to 86,408. This increase has been owing, in part, to the advantageous situation of the town for an emporium, from its easy communication with the lakes by means of the Genesee, which is navigable to within 2 m. of the town, and with the country traversed by the Erie and Genesee canals, and by various railways, which either terminate in or pass by the town; but principally, perhaps, to its immense command of water-power, the various falls of the Genesee river within its limits amounting in all to 268 ft. in perpendicular height: it has, in consequence, many large flour-mills, and is, in fact, become the principal seat of the flour-trade of the Union. It has also a variety of other large establishments, the moving power in which is supplied, wholly or in part, by water—such as fulling mills, woollen and cotton factories, and iron foundries. In addition, it has extensive tanneries; and boat-building, both for the canals and for the trade of the lakes, is carried on with great spirit.

Rochester is well-built, having wide streets, large 'stores' and warehouses, and many neat, and some superior dwelling-houses, with shrubberies attached. Being the cap. of a county, it has a court-house, gaol, and other county buildings; numerous schools, academies, and churches; a collegiate institution and museum; various public banks, and one of the largest savings' banks in the state. It was incorporated as a city in 1834.

ROCROY, a town of France, dép. Ardennes, cap. arrond., in an extensive plain, near the Belgian frontier, 15 m. N. by W. Mezières. Pop. 3,282 in 1861. The town is surrounded by a rampart strengthened with bastions and *demi-lunes*; is the seat of a tribunal of original jurisdiction, and has a military hospital, a society of agriculture, and some hardware manufactures.

Rocroy having been besieged by a Spanish army in 1643, the Prince of Condé, then duke d'Engliën, and only 21 years of age, advanced to its relief, with an army inferior in numbers and in the quality of the troops. But the extraordinary

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talent and brilliant courage of the prince more than made up for his inexperience and the inferiority of his force. The French gained a complete victory (19th May, 1643). The Spanish infantry, which had hitherto been invincible, was cut to pieces; and the French arms acquired a superiority which they preserved for more than 60 years, or till the battle of Blenheim. The humanity of Condé, henceforth called 'le Grand,' was as conspicuous on this occasion as his talents and his courage.

ROMANS, a town of France, dép. Drôme, in a fine plain, on the Isère, by which it is separated from the Bourg-de-Péage, on the opposite side of the river, the communication between the two being maintained by a fine bridge, 12 m. NE. Valence, and 35 m. WSW. Grenoble. Pop., including Bourg-de-Péage, 11,257 in 1861. Romans, which is surrounded by an old wall flanked with towers, is a handsome well-built town, and has some fine promenades. The parish church is the only remaining portion of the famous monastery founded here by St. Bernard, in 837, to which the town owes its origin. Romans has a theatre, a *pensionnat*, or school for the gratuitous education of young ladies, and a tribunal of commerce, with manufactures of silk and woollen stuffs, hosiery, and gloves. It has also an active trade in the produce of the dép., including silk, wool, wine, oil, and truffles, which is much facilitated by the junction of the Isère with the Rhone.

The famous Baron Lally, who, having distinguished himself at the battle of Fontenoy, was subsequently sent as commander-in-chief of the French forces to India, was a native of Romans, where he first saw the light, on the 15th of January, 1702. Being of a violent, irritable temper, and involved in the greatest difficulties, Lally got embroiled with every body. After the fall of Pondicherry, in 1761, he returned to France, where, pursued by the hatreds he had excited in India, he was, after a lengthened imprisonment, tried by the parliament of Paris, and condemned to be decapitated. This sentence was carried into effect on the 9th May, 1766.

ROME, the most celebrated of European cities ('*Lux orbis terrarum, et arx omnium gentium*:' Cicero, Catil. iv. cap. 6), famous alike in ancient and modern history; first, as the metropolis of the most powerful nation of antiquity, and, afterwards, as the ecclesiastical capital of Christendom, and the residence of the pope, on both sides the Tiber, but principally on its E. bank, about 16 m. from its mouth, 115 m. NW. Naples, and 145 m. SSE. Florence, on the railway from Florence to Naples. Pop. 201,161 in 1863. Modern Rome, which interests alike by its classical associations, its antiquities, its churches, and its works of art, is surrounded by walls (mostly occupying the site of those constructed by the Emperor Aurelian), in the form of an irregular polygon, about 14 m. in circ., the longest diameter being from the Porta del Popolo, NW., to the Porta S. Sebastiano, SE., about 3 m. in length. The city has 16 gates, three or four of which, however, have been walled up: of these, the principal are the Porta del Popolo, on the road to Florence and Ancona; the Porta Pia, on the road to Tivoli; the Porta Maggiore, leading to Palestrina; and the Porta S. Giovanni, leading SE. to Albano and Naples. But not more than a third part of the enclosed area is covered with buildings, the rest consisting of ruins, gardens and fields, with some churches, convents, and other scattered habitations. The older part of the ancient city, where the principal ruins are found, is about $\frac{1}{2}$ m. S. from the modern city; but it is needless to add,

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that the former, under the emperors, was much more extensive than the modern town, inasmuch as, besides the space within the walls, it had very extensive suburbs. The ground occupied by the city is mostly low, being only from 35 to 45 ft. above the level of the sea. Exclusive, however, of the low grounds, several low hills, or eminences, are comprised within the limits of the city; and in consequence of ancient Rome being popularly said to stand upon seven hills, it was sometimes called *arx septicollis*. The following measurements exhibit the height of the hills now referred to:—

| | Eng. Ft. | | Eng. Ft. |
|---|----------|------------------------------------|----------|
| Capitol, at the W. angle of the Tarpeian rock | 151 | Esquiline Hill | 218 |
| Do. at N. end | 160 | Quirinal Hill at the Pope's Palace | 158 |
| Palatine Hill | 170 | Ancient pavement of the Forum | 39 |
| Aventine „ | 156 | Do. do. of Trajan's Forum | 43 |
| Celian „ | 168 | | |
| Pincian „ | 218 | | |

The Palatine Hill, the nucleus of the city, comprises a space of about 40 acres, and appears originally to have had precipitous edges; but excepting this, and the Capitoline Hill, comprising about 16 acres, the rest have an easy ascent, and are, in fact, mere eminences. No doubt, however, owing to the accumulation of rubbish in the valleys, and the lowering of the hills by rains, and the digging of foundations, the elevations of the latter must have been much more striking in antiquity than at present. The seven hills, properly so called, on the E. bank of the Tiber, were included in the city so early as the reign of Servius Tullius; but at a later period the Mons Pincius (Pincian Hill), to the NE., and the Mons Vaticanus, and part of the Mons Janiculus, on the W. side of the Tiber, were enclosed within the city walls. The hills consist chiefly of volcanic tufa intermingled with thin beds of travertine, making good building stone, as well as of silicious sand, and a few layers of pumice and scorise; while the low ground, which has been raised several feet above its ancient level, apparently by the deposits left by frequent floods, is covered with calcareous sands, marls, clays, or silt.

Rome is divided into fourteen districts, or *Rioni*, eleven of which are in the portion now inhabited; but the more popular, and for general purposes more intelligible, distribution of the city is into a central portion on the low ground E. of the Tiber, the ancient Campus Martius, a division to the E. of the latter, on the Pincian, Quirinal, and Viminal Hills, and a third division on the W. side of the river. The first of these quarters is the chief seat of bustle and trade: it is intersected by the Corso, and has some other good streets. On the NW. side of the Capitol is the meanest and dirtiest part of the city, chiefly inhabited by Jews, and many degrees worse than Monmouth Street or Houndsditch in London. The upper part of the city, on the Pincian and Quirinal Hills, is less densely covered with houses, and chiefly comprises palaces and villas, churches, convents, and gardens; it is intersected near the pope's palace on the Quirinal Hill by two fine avenues, crossing each other at right angles, and having four fountains at the point of intersection. Between the Quirinal and Esquiline Hills are several streets inhabited by the lower orders, and extending to the Via Vaccina, a rather broad thoroughfare leading to the Roman forum. Beyond N., E., and S., are gardens and fields, studded here and there with villas, churches, and ruins, including the baths of Diocletian and Titus, and the Colosseum. That portion of Rome which lies on the right or W. bank of the river, consists of two parts: the Vati-

can, northward, in which are comprised the Castle of St. Angelo and St. Peter's; the glory not merely of the eternal city, but of Christendom; and the Trastevere or ancient Janiculum, southward, which has the street, called from its length (nearly 1 m.), Via Longara, a botanic garden, and the Villa Corsini.

The modern city of Rome is dull, dirty, and, with a few striking exceptions, meanly built. Most of the streets are narrow, crooked, and badly lighted. From this general censure, however, must be excepted the Corso, already alluded to, extending in a straight line more than a mile, from the Porta del Popolo to the foot of the Capitoline Hill, and which, in the greater part of its extent, is 50 ft. wide, with *trottoirs* at the sides, which, however, are so narrow, and so often encroached on, as to be, in fact, of little service: it is lined with many handsome palaces, some of which may vie in grandeur with the noblest in Italy. Two other streets, the Strada di Ripetta and the Strada del Babuino, diverging from the open space before his holiness's palace, are long, straight, and tolerably wide. These three streets are crossed by a line connecting the bridge of St. Angelo with the Pincian Hill, and forming one of the most bustling thoroughfares in Rome. With these exceptions, however, the streets are mean looking, and the houses have a shabby, dilapidated appearance, wholly unworthy so celebrated a city. The private houses are usually from three to five stories in height, built of tufa or brick, and plastered over. With these are intermixed many huge old buildings (*paluzzi*), contrasting most strikingly with the surrounding slight, mean tenements, by their bulk, height, and air of antique grandeur. In consequence, however, of the decay of the families to which they belong, many of them are now turned into ecclesiastical colleges or hotels, or let to foreign ambassadors or noblemen; and in those which have escaped this fate, the lower story is sometimes let for shops, and sometimes retained for stables, coach-houses, and servants' rooms. The second story is generally a picture gallery, consisting of a suite of rooms all opening into each other, and richly adorned with marble and painted ceilings. The owner of the building occupies the third story, or, if there be a fourth, the third and fourth, throwing open his galleries to artists and all who choose to give two or three *pauli* to his servants. Generally speaking, these buildings exhibit great simplicity of design, usually presenting to the street one simple continued line of surface, rarely decorated either with columns or pilasters. Ornaments round the windows are never omitted, but are generally too large, and in bad taste. The stories are generally divided by horizontal mouldings along the front, and great space is left between the ranges of windows. The whole is crowned by a large and rich cornice.

Rome has not a single square; and of the piazzas or paved areas, the Piazza del Popolo, the Piazza Navona, and that in front of St. Peter's, are the only three that deserve notice. They are adorned with obelisks, statues, and fountains; but the first and last being at the extremities of the town, are lost as places for walking in or meeting friends. The fine promenade on the Pincian Hill, E. of the Piazza del Popolo, is planted with trees, and commands an extensive view; but it is of small extent, and is shut at sunset. Without the walls, however, on the N.E. side of the city, is the Villa Borghese, the grounds of which, nearly 3 m. in circ., planted after the fashion of an English park, and ornamented with statues and fountains, are open to the public, and constitute the favourite

resort of all classes, whether on foot or in carriages. Rome, like London and Naples, is destitute of promenades sheltered from the weather, and well lighted at night, a convenience which Paris has in perfection; and another defect is the absence of elegant shops, cafés, and restaurants, that form so striking a feature in the French capital. In the number and grandeur of its public fountains, however, and in the quality of its water, Rome surpasses every city. Almost every public *piazza* has its fountain, and almost every fountain has some peculiarity in its size, form, or situation, to attract attention. The finest of these, and perhaps the most magnificent in the world, is the fountain of Trevi, which has a white marble basin in a vast inclosure paved with large slabs of the same material. It represents a palace of Neptune placed on a rough, broken rock, and adorned with Corinthian pillars; in the centre of the building, under a rich arch, stands Neptune in his car drawn by sea-horses; and water runs down in torrents from the rock, making, as it were, a sea at its base. In the summer the waters overflow their usual limits, fill the whole marble basin, and rise to a level with the square, which after sunset is a favourite lounge of the inhabs. The fountain in the Piazza Navona has an obelisk in its centre, surrounded by Tritons and Naiads, seated on rocks, and spouting forth water in magnificent *jets d'eau*. The Fontana felice, on the Viminal Hill, discharges itself under an Ionic arcade through a rock, which a figure of Moses is striking with his rod. Other figures surround the prophet, and below are four lions hanging over the basin, as if eager to slake their thirst. These and the other fountains of the city are supplied from three only out of the numerous aqueducts which attest the luxuriance of the ancient city; and yet such is the quantity they convey, and so pure are the sources whence it is derived, that no city can boast of such a profusion of clear and salubrious water, poured forth spontaneously in *jets d'eau*, without the aid of expensive machinery, as at Versailles, St. Cloud, and Chatsworth.

The great glory of modern Rome consists in the magnificence of her churches, and, above all, in the matchless structure of St. Peter's.

— thou, of temples old, or altars new,
Standest alone—with nothing like to thee—
Worthiest of God, the holy and the true.
Since Zion's desolation, when that He
Forsook his former city, what could be,
Of earthly structures in his honour pil'd,
Of a sublimer aspect? Majesty,
Power, Glory, Strength, and Beauty, all are aisd'
In this eternal ark of worship undefil'd.'

This magnificent fabric occupies the site of an older structure raised by Constantine the Great. Pope Julius II. laid the first stone of the new building on the 18th of April, 1506; having selected the famous Bramante for his architect. But the latter dying in 1514, other architects were employed to carry on the work, till, in 1546, it was fortunately committed to the illustrious Michael Angelo, who nearly completed the dome, and a large portion of the building. After Michael Angelo's death, in 1563, the work was prosecuted under other architects, till its completion in 1614. The colonnade by Bernini was added in 1655-67. 'St. Peter's,' says a well-known English traveller, Mr. Maclaren, 'unlike many other celebrated edifices, surpasses expectation. The front is too low, and has some other defects; but the vestibule is admirable, and the interior is solemn, grand, rich, harmonious, beyond anything that I had conceived. It is unquestionably the noblest building ever reared by human hands, the only work of

art, as Madame de Staël observes, which produces an impression of grandeur akin to that which we receive from the works of nature. So vast are its dimensions, that colossal statues and monumental groups of figures are stowed away in its aisles and recesses without impairing the unity and simplicity of the plan, as they do in the St. Paul's of London. The interior of the dome (which is 140 ft. in diameter), as well as a considerable portion of the other surface, is covered with pictures, all of which, however, are, with one exception, of mosaic. The eye forms most erroneous estimates respecting the height of the different parts of St. Peter's, and most visitors are on this account disappointed by first impressions. The splendid bronze *Baldacchino*, or canopy, immediately under the dome and over the high altar, close also to the supposed tomb of St. Peter, is about 120 ft. high, though in appearance only 30. The chair of St. Peter, too, behind the high altar, appears from a distance as if raised only a few steps from the ground, whereas it is placed on an elevation 70 ft. above the floor. The pen seen in the hand of the prophet in one of the lower compartments of the dome, might be supposed to be 12 or 18 inches in length, whereas its real length is 6 ft. The visitor has no adequate conception of the magnitude of the dome until he arrives at the roof (the passages of which are so contrived that one may ascend on horseback), when he finds it rising before him like a mountain. The view from the external gallery round the lantern is exceedingly fine and extensive, embracing the Campagna from the sea to the Apennines; besides which, on looking at the roof of the church, its ten cupolas give it somewhat the appearance of a town, so astonishing is its size. The depth of the floor, as seen from the interior of the lantern, appears lessened from 400 ft. to 100 ft.; but it may be discovered that the eye is deceived, as the promenaders below appear only as tiny infants. When we stand in the interior gallery of the cupola corresponding with the whispering gallery of St. Paul's in London, and look at the mosaics on the concave, we are surprised to find them composed of square bits of coloured stone, half an inch broad, clumsily put together, often with intervals between them; yet, seen from below, they might pass for oil paintings. We find a pictured face of an angel close to us nearly a yard broad; but, when we look across the gallery, a similar face, and really of equal proportions, seems to be of the natural size. The lights in this splendid edifice are finely tempered, well distributed, and kept in admirable order. The profusion, also, of rare and beautiful marble, introduced in every part, together with the gilded roof, the statues, monuments, mosaic ceilings and pictures, forms a display of brilliant and unexampled magnificence, which requires weeks and almost years to contemplate.

The form of the church, as designed by Bramante, was that of a Latin cross; but this was changed by Michael Angelo to a Greek cross, which has the advantage of exhibiting the whole structure at one *coup-d'œil*. Unfortunately, however, the plans of the latter were afterwards departed from by Carlo Maderno. In the caustic, and, perhaps, unjust language of Forsyth (Italy, p. 179), 'a wretched plasterer came down from Como to break the sacred unity of the master-idea, and him we must execrate for the Latin cross, the aisles, the mean-looking attics, and the low, ugly front.' The latter, however, is 396 ft. in length, and 159 ft. in height; and with whatever defects it and other parts of the structure may be charged, still there can be no question that St. Peter's is, beyond all comparison, the most

magnificent temple ever raised by mortal hand to the worship of the Supreme Being.

Of the many august ceremonies performed in this magnificent temple, the most imposing is that of the *Tenebræ*, on the night of Good Friday, when the hundred lamps that burn over the tomb of St. Peter are extinguished, and a stupendous cross of light appears suspended from the dome between the altar and the nave, shedding over the whole edifice a soft lustre, delightful to the eye, and forming, with the objects animate and inanimate on which it sheds its light, a scene singularly striking, by a happy mixture of tranquillity and animation, of darkness and light, of simplicity and majesty; a scene, indeed, far more sublime and more deeply impressive than the illumination of the external dome on the night of St. Peter's day (June 29).

The dimensions of St. Peter's have been variously given by different authorities; and perhaps exactness is not attainable; but the following measurements are generally adopted, and may, perhaps, be depended on. For purposes of comparison, the following table also gives the dimensions of St. Paul's London, of Milan cathedral, and St. Sophia's at Constantinople.

| Dimensions | St. Peter's | St. Paul's | Milan Cath. | St. Sophia |
|---------------------------------|-------------|------------|-------------|------------|
| Extreme Inside Length | Ft. 607 | Ft. 510 | Ft. 493 | Ft. 269 |
| Length of Transepts | 445 | 282 | 284 | 248 |
| Height from Cross to Floor | 458 | 362 | 356 | |
| Width of Nave | 107 | .. | 177 | |
| Total Area, incl. Outside Walls | 227,000 | 84,000 | | |

Comparing the Roman church with the British cathedral, which, though *longo intervallo*, may well claim to be the second in the world, the floor of St. Peter's covers nearly 5 English acres (nearly the size of the Coliseum), while that of St. Paul's occupies only 2 acres; and the actual bulk or entire contents of the former, as compared to the latter, are as 4 to 1. St. Peter's is supposed to have cost with its monuments, gilding, and embellishments, from 12 to 16 millions sterling, whereas the cost of St. Paul's did not exceed 750,000*l*.

It is to be regretted that the situation of this cathedral of Christendom has been remarkably ill chosen. 'No building,' says Mr. Woods (Letters of an Architect, i. 368) 'of great consequence, was ever so badly placed. There is no distant point of view in which this church gives the impression of great magnificence, or from which it has the appearance of being such an immense building as it really is. This is owing to its situation in a hollow between the Janiculate and Vatican Hills, which are connected by a neck behind it; so that, on three sides, it is surrounded by slopes rising almost immediately from it to about the height of the nave; and even in front, notwithstanding the large space before it, the building seems encumbered with houses, which occupy a slip extending towards the river. From the bridge of St. Angelo little is seen but the dome itself; and even when a glimpse is at length caught of its front and of the circular colonnade by which it is approached, it appears much nearer than it is; and the magnificent avenue, the *chef-d'œuvre* of Bernini, seems a finer object than the edifice to which it leads.' This colonnade, which consists of two opposite semi-ellipses, forming each a broad covered passage leading to the front of the

cathedral, comprises 256 Doric columns of travertine 40 ft. in height, arranged in four rows, and surmounted by 192 statues of saints. In the central space, between the colonnades, flanked by two fountains, is an obelisk, consisting of a single block of granite about 80 ft. in height, surmounted by a cross, the total altitude being 136 ft.: it was brought from Egypt to Rome by Caligula, and formerly stood in the circus of Nero, having been removed to its present situation by Pope Sixtus V.

Among the churches of Rome, that of St. John Lateran, at the SSE. extremity of Rome, far from the modern buildings, and upwards of $\frac{1}{2}$ m. from the Coliseum, is entitled to the second place, and in former times was superior to St. Peter's. The chapter of the Lateran even now takes precedence, and the popes are always crowned here. This church was built on the site of an older structure in the beginning of the 14th century. Its front, consisting of a magnificent colonnade, is certainly impressive, notwithstanding its numerous faults. There are 5 entrances; that in the centre having a bronze door taken from the Temple of Peace in the Forum, and on the top of the façade are 15 statues of our Saviour, and various saints. The interior is divided into 5 aisles, and in the pillars of the nave are colossal statues of the Twelve Apostles. This church comprises also a chapel of the Corsini family, in the form of a Greek cross with a central dome, gorgeously decorated with marbles, gilding, and pictures, and said to be one of the richest in Rome. Adjoining this church is a palace, which, after having been for many centuries the residence of the popes, was converted, in 1693, into a hospital for the poor; and at no great distance is the Scala Santa, a building celebrated for containing a staircase of 28 white marble steps, alleged to have belonged to the palace of Pilate at Jerusalem, and which orthodox Roman Catholics esteem a meritorious act of piety to ascend on their knees; indeed, so great is the number of the devotees, that, with a view to the preservation of the steps, they have been covered with planks of wood. The church of St. Paul's, outside the walls, one of the handsomest in Rome, and in many respects superior to that of St. John Lateran, was burnt down in 1823, and has recently been rebuilt. The basilica of St. Maria Maggiore is a very fine and large edifice; but the profusion of its ornaments takes from the unity of the main design, and the narrow brick tower, rising above the whole, is in very bad taste. The interior has three aisles, the central one being lined by 36 Ionic pillars of white marble, which have a very beautiful effect: they are undoubtedly ancient, and may have belonged to the temple of Juno Lucina, that formerly stood here. A chapel in this church, belonging to the Borghese family, deserves notice for the richness of its decorations. The church of St. Pietro in vicolo, originally erected about anno 420, but since wholly rebuilt, presents to the eye a noble hall, supported by 20 Doric columns of Parian marble, open on all sides, adorned with some beautiful tombs, and terminating in a semicircle behind the marble. But it is principally remarkable for its containing the tomb of Julius II., illustrated by the noble statue of Moses by Michael Angelo. The other churches are so numerous, that it would be an almost endless task to describe them: many of them command admiration from the splendour of their decorations and the articles of *virtù* which they contain; but perhaps the finest and most worthy of attention from the stranger are those of Santa Agnese, in the Piazza Navona, San Carlo al Corso, San Ignazio, the Santi Apostoli, the

Chiesa di Gesu, and the Chiesa Nuova; all of which are abundantly rich in marbles and gilding, though not always disposed in the best taste.

The Vatican, the most ancient and by far the most celebrated of the papal palaces, is a mass of buildings erected at various times by different popes, said to cover a space about 1,200 ft. in length by 1,000 ft. in breadth, and to comprise above 4,000 apartments. The effect, however, is anything but pleasing: from no point of view does it present any extent of front or magnificence of design; while its proximity to St. Peter's interferes most unfortunately with the view of that building. The interior consists of a suite of galleries of small breadth, which, if placed in a continuous line, would extend two miles in length. It contains a countless multitude of inscriptions, statues, busts, reliefs, urns, sarcophagi, and vases, to say nothing of its literary and numismatic treasures, its books, MSS., and drawings, the number of which the visitor can only guess at by counting the presses that conceal them from his sight. Taken altogether, it is by far the richest museum in Europe, and the precious objects it contains are magnificently lodged; for when the church was rich, she patronised the arts liberally both by buying and building, and even now the posthumous benevolence of popes and cardinals occasionally expends itself in erecting a new gallery, or embellishing an old one. The collection of sculptures is beyond all comparison the largest and most valuable in Europe, comprising, among other great works, the unequalled group of Laocoon and his sons, which even Michael Angelo despaired of being able to restore, the celebrated Apollo Belvedere (found at Antium, near the close of the 15th century), the well known group of the Nile and his offspring, the Belvedere torso of Hercules and Hebe, a noble statue of Adonis, and another of Marcellus, with an excellent bust of Pius VII. by Canova. The library of the Vatican is alleged to comprise about 80,000 printed books and 85,000 MSS.; but, in point of fact, its literary riches are unknown, the catalogues having never been completed. There is reason, however, to think that its collection of ecclesiastical MSS. immeasurably surpasses any other in Europe; but it is very deficient in works of modern literature, and its value can be fully appreciated only by the churchman and the antiquary. The picture gallery, which is by no means extensive, is, as compared with the collections now noticed, quite of modern creation. The frescoes of Raphael and Michael Angelo, indeed, have long adorned the walls of the Vatican; and the works of the former occupy three open galleries, called the *Loggie di Raffaello*, which go round three sides of a square court; but the oil paintings have been collected wholly by Pius VI. and subsequent pontiffs. It comprises several of the *grand* productions of the Italian schools, including, among others, the 'Transfiguration,' by Raphael, usually considered his *chef-d'œuvre*, and generally held to be the noblest work of art in the world; the 'Madonna di Foligno,' by the same master; the 'Communion of St. Girolamo,' by Domenichino; the 'Martyrdom of St. Sebastian,' perhaps Titian's very best work, and the 'Madonna of Monte Luca,' by Giulio Romano. The Vatican has two chapels, the most celebrated of which, known as the Sistine chapel, was built by order of Pope Sixtus IV.; its walls and ceiling were covered during the pontificates of Julius II. and Paul III. with frescoes from the masterly hand of Michael Angelo. Behind the altar is the magnificent painting of the Last Judgment, the theme of much eulogy and much criticism; and on the ceiling are represented the Creation, the Deluge.

and other scriptural subjects, the windows being adorned, somewhat inconsistently, with full length figures of prophets and sibyls. It is a very large and lofty oblong room, with scarcely any of the furniture of a chapel: it is used on few occasions, except during the Holy Week, when the *Tenebræ* and the 'overwhelming' *Miserere* of Allegri are sung by the papal choir. In this chapel, also, the cardinals meet in conclave for the election of a new pope. The Sala Regia, a hall of great size and good proportions, connects the above-mentioned chapel with another dedicated to St. Paul, which, like the first, is painted in *fresco* by Michael Angelo, and used only on great festivals. The Vatican is now seldom inhabited by the pope, except during the grand festival of Easter, the present abode of the pontiffs being on the Quirinal Hill (now called Monte Cavallo, from the two horses on its summit, taken from the baths of Constantine). This palace, which was begun by Paul III., presents two long fronts, plain and unadorned, like those of most of the other palaces, the court within being upwards of 300 ft. in length by 165 ft. in width, three sides being surrounded by porticoes, and the fourth having a double row of arcades surmounted by a clock tower. The grand staircase on the side to the right of the gateway conducts to the papal apartments, the gallery, and the chapel, all of which are on a grand scale, and adorned with fine paintings, especially those by Guido, which ornament a small private chapel. The adjoining gardens are spacious, refreshed by several fountains, and shaded by groves of laurel, pine, ilex, and poplar; but little attention being paid to them, they have a shabby, neglected appearance, made only more apparent by their great size. In front of the palace stands an Egyptian obelisk, flanked on either side by the statues of the horses which, as already stated, give the hill its present name. The Lateran Palace, near the church of St. John Lateran, has three lofty fronts of great extent and simplicity: a few apartments are reserved for the pope, when he comes to perform service at St. John's, but the rest is used as a hospital for 250 orphans.

Among the public buildings of modern Rome, the *Campidoglio*, or modern capital, deserves notice, as being one of the best architectural works of Michael Angelo. The road to it is by a labyrinth of narrow dirty streets, leading from the Corso to two flights of steps, at the foot of one of which are two basaltic lions. At the top are colossal equestrian statues of Castor and Pollux, on a line with which stand several other statues and trophies. Opposite the steps is the senator's palace, the two other sites being occupied by the Palazzo de Conservatori and the Museo Capitolino, the garden of which overhangs the Tarpeian rock,

——— 'fittest goal of treason's race,
The promontory whence the traitor's leap
Cured all ambition.'

But, owing to the accumulation of soil at the bottom, this leap might now be taken without any very extraordinary risk.

The ancient buildings, to be noticed in the sequel, are nearly all gone; but there are many statues, and one in particular, a bronze equestrian figure of M. Aurelius, occupying the centre of the Piazza del Campidoglio, demands attention, not only on account of its beauty, but its acknowledged antiquity. In fact, quite enough is still furnished both by Nature in the commanding position of the hill, and by Art in the various architectural embellishments, formed principally of ancient materials, to call up in the mind of the classical student those by-gone days when decrees issued

from the capitol fraught with the destinies of a subject world.

'Ages and realms are crowded in this space,
This mountain, whose obliterated plan
The pyramid of empires pinnacled.
Hither the kingdoms and the nations came
In supplicating crowds to learn their dooms.'
Childe Harold.

The Capitoline Museum comprises a few and not very valuable paintings by the old masters; but, on the other hand, the collection of statues and marbles includes some of the most precious relics of ancient art, among which may be mentioned the 'Dying Gladiator,' the misnamed 'Antinous,' and the splendid group of 'Cupid and Psyche.' The only other government buildings requiring notice are the new post-office, in the Piazza Colonna, near the Corso, and the castle or citadel of St. Angelo: the central tower of the latter was built by Hadrian (thence called *Moles Hadriani*) for a mausoleum, and was unquestionably the most superb sepulchral monument ever raised in Rome. It began to be used as a fortress when the city was attacked by the Goths: its defences were strengthened by various pontiffs, the last and greatest improvement having been made by Urban VIII., who completed the *fosse* and bastions towards the meadows. It is now used as a state prison and house of correction, but is better known to foreigners as the place whence are discharged the magnificent fireworks of the Easter festival.

Rome comprises a great number of palaces, of which a few deserve particular notice. The Colonna palace, in the square of its own name, fronting the Corso, is entered by a noble painted staircase, leading to a gallery which, in point of size and architecture, is the finest in Rome: the roof of the saloon is supported by polished columns of *giallo antico*, and the ceiling displays the battle of Lepanto, the event of which raised a Colonna to the honours of a Roman triumph. The Borghese palace is also a very splendid building, remarkable for its extent, its porticoes, its granite columns, and its long suite of apartments, being still more distinguished by the well-supported magnificence that pervades every part, and gives the whole mansion, from the ground-floor to the attic, an appearance of neatness, order, and opulence. The collection, which, contrary to the usual rule, is on the ground-floor, occupies nine large rooms, and ranks among the first in Rome. The Doria palace, in the Corso, has three vast fronts, and comprises a spacious court, surrounded by colonnades: the gallery is particularly rich in paintings of the Italian and other schools, including many landscapes by Gaspar Poussin and Claude. The Barberini palace, one of the grandest buildings in modern Rome, built from the united designs of Maderno, Bernini, and Borromini, consists of a projecting centre, surmounted by a square lantern and two smaller wings; it comprises, also, besides statues and paintings, a noble library, freely thrown open to the public. The Farnese palace, a noble structure, to erect which the Colosseum and the theatre of Marcellus were despoiled of their choicest ornaments, had formerly a magnificent and, in some respects, unrivalled collection of ancient sculpture, paintings, and books. But the ex-king of the Two Sicilies having succeeded to the rich inheritance of this illustrious family, the collection was carried to Naples some years ago. On the ceiling of a gallery belonging to the Rospigliosi palace, on the Monte Cavallo, is the famous Aurora, the *chef-d'œuvre* of Guido, which the beautiful engraving by Morghen must have made familiar to many of our readers. The

Bracciano and *Corsini* palaces, and others too numerous to be mentioned, deserve attention for their architectural merits and the treasures of art with which they are furnished.

Rome, besides its palaces, has numerous *villas*, both within and without the present walls, built chiefly by a few cardinals, whose riches, taste, learning, and leisure, conspired to create these beautiful retreats. The Villa Borghese has already been mentioned as including pleasure-grounds that form the favourite resort of the modern Romans; and the mansion, with its collection of pictures and marbles, is equally beautiful. The Villa Albani, outside the Porta Salara, is of exquisite design, planned by Cardinal Albani, one of the profoundest antiquaries of modern times: it was here that, under his patronage, Winkelmann pursued those studies that enabled him to write his history of ancient art. The collection, once far more extensive, is said to be extremely choice; in fact, it does not contain a single mediocre piece. The villas Aldobrandini, Pamfili, Lanti, and Ludovisi are all, more or less, adorned with frescoes and ancient statuary; besides being well situated and surrounded with fine gardens. The magnificent Medici villa, on the Pincian Hill, is now appropriated to the use of the French Academy.

The Tiber, including its windings, runs for 3 m. through Rome. The greatest breadth of the stream within the walls is only about 400 ft., and the smallest 200 ft., the average being somewhat less than one-third the breadth of the Thames at London Bridge, and considerably less than that of the Clyde at Glasgow. It is deeper, however, than the Clyde, and has certainly a larger volume of water.

'Vorticibus rapidis et multâ flavus arenâ
In mare prorumpit.' Virg. *Æn.* vii. 81.

It well merits the epithet of *flavus*, as it is not only discoloured, but loaded with yellow mud beyond almost any other river; and this is not the consequence of accidental floods, for its waters are scarcely ever clear, and hence, no doubt, its ancient name *Albulu*. Its banks are low and tame, consisting, for the most part, of crumbling soil, without quays, and at many places without even protecting walls, and they are not ornamented by a single promenade or fine street. There are only two places where there is a sort of quay, or landing-place, one called *Ripetta*, on the E. bank, above the bridge of St. Angelo, where boats from the inland provs. land wine and provisions, and the other at the S. end of the city, on the opposite bank, called the Porto di Ripa Grande, where sea-borne vessels land their cargoes, and where there is a line of warehouses, and a custom-house. Three bridges cross the river within Rome; that most northward is the Ponte St. Angelo (anc. *Pons Ælius*), built by Hadrian, and restored in its present form by Clement IX.: it is a structure of no great beauty, having a balustrade, on the top of which are several hideous-looking figures of angels. The next, proceeding southward, is the Ponte Sisto (anc. *Pons Janiculensis*), built by either Trajan or Antoninus Pius, and rebuilt by Sixtus IV., in the 15th century. About half a mile lower down is the island of San Bartolomeo, the ancient *Insula Tiberina*, of oblong shape, about 1,000 ft. in length, and 300 ft. in breadth, united with the E. bank by the Ponte San Bartolomeo (anc. *Pons Cestius*), and with the W. bank and the district of Trastevere by the Ponte di Quattro Capi, so called from a head of Janus (Quadrifrons) that formerly stood there; it is the Pons Fabricius of antiquity, and was

constructed anno 61 B.C. Within Rome, also are the remains of three ancient bridges, the principal being the *Pons Triumphalis*, so called from the circumstance of the triumphal processions crossing it on their way to the capitol: it is now entirely destroyed, but the piers of it may be distinguished by the agitation of the water a little below the bridge of St. Angelo. About half of the Pons Palatinus, the most ancient bridge of Rome, is still standing, a few yards below the island of San Bartolomeo, and a continuation has been made of wood for the accommodation of foot passengers. The Pons Sublicius or Æmilius, the most southerly of the old Roman bridges, has long disappeared. The Tiber is now, as it was in Virgil's time, subject to very high and also frequent floods, the water sometimes rising as high as the Piazza di Spagna, and very frequently laying under water all the streets in the busy quarter near the river. On the Porto di Ripetta are two pillars which mark the height of the different floods for some centuries past, and it appears from it that they have all happened between the months of November and February. The frequency of these inundations gave rise to various projects for preventing them, and Aurelian caused the banks to be raised and its channel cleared. The vast accumulation of soil by which the surface of modern Rome is raised so many feet above the ancient city, makes it less liable to suffer from floods now than formerly.

The CLASSICAL MONUMENTS of Rome are very numerous, their interest depending on their beauty, grandeur, and singularity, their intrinsic merits, or on the events and personages historically associated with them. Those who expect gratification from the first source will, in many instances, be disappointed, as the greater number present little to please the eye or gratify the taste. The *aqueducts*, for example, those astonishing efforts of human industry, which stretch across the Campagna in various directions, exhibit their real greatness only to the understanding. To the eye, these works (of which there seem to have been fourteen, coming from nine different sources), present merely a series of naked brick arches, scarcely larger than a house-door in span, or higher than a park-wall, and without any sort of ornament. Near the mountains, and in crossing valleys, they may be lofty; but in the vicinity of the city they are low and tame: three only now remain in a state fit for use, viz. the *Acqua vergine*, *Acqua felici* (anc. the *Claudian Aqueduct*), and the *Aqua Sabatina*, which supplies the Janiculum. The Roman roads, also, solidly built of large stones, may be called great works for their expense and utility, but they have no external attractions. The same remark applies to the *Cloacæ*, of which a false idea is conveyed by calling them *sewers*. They were rather drains made to carry off the stagnant water of the pestilential marshes, which occupied much of the low ground near the Tiber, and the spaces between the Aventine, Palatine, and Capitoline Hills. They were constructed at a very early period (according to some, in the time of the kings), for the obvious reason, that the marshes separated the first inhabited parts of the city from each other, and their desiccation became indispensable. The height and width of the *Cloaca maxima* are equal, each measuring 13½ ft.: a view of it may be obtained at its mouth, where it flows into the Tiber a little below the Ponte Rotto, another portion being visible near the arch of Janus Quadrifrons.

The *baths*, as they now exist, are an assemblage of naked, half-dilapidated brick walls, which sur-

prise by their huge size and the extent of ground they cover. The former existence of *eight* *thermae*, erected by different emperors, is known; and the carcasses of three remain in considerable masses, those of Titus, Caracalla, and Diocletian, the ruins of the first two of which are in vineyards, a great part of the last having been transformed by Michael Angelo into the church and monastery of Santa Maria degli Angeli. Each consists of a labyrinth of apartments, the uses of some of which antiquaries have scarcely been able to conjecture. Caracalla's baths covered an area of 28 English acres, a space nearly three times the size of Lincoln's Inn Fields, in London. 'But we must keep in mind,' says Mr. Maclaren (Notes, p. 142), 'the multifarious nature of these establishments, which included not only baths, with their caldaria, frigidaria, and sudatoria, but porticoes and gardens, libraries, lecture and conversation rooms for the philosophers, academies and halls for declamation, gymnasia for the 'fancy,' theatres for the gay, temples for the devout, and, most probably, wine shops or places of refreshment for all; in fact, they were less baths than 'places of universal recreation.' The Roman citizen left his house early, and only returned at night to his bed, spending the day chiefly in the forum, the courts of justice, or at the baths. The latter establishments seem to have combined the uses of our coffee-houses, reading-rooms, libraries, lecture-rooms, and theatres, as well as baths. We may call them, indeed, national *club-rooms*, supplied with every species of accommodation then in vogue, and open to the whole free citizens of Rome. It is this circumstance which gives them their interest. We cannot tread these ghastly chambers, where no sound now falls on the ear save the echo of our own steps, without thinking of the animated throng that once peopled them, the crowd of Roman citizens of all grades and classes, from the emperor to the mendicant who received his monthly dole of wheat from the public granaries, the foreigners from every clime, princes, tax-gatherers, hostages, petitioners, litigants, soldiers, parasites, who came to the seat of empire for business or pleasure. All these must have resorted to the baths, some for ablution, exercise, or amusement, some to read in the libraries, some to listen to the philosophers, some to talk of the news and hear bulletins read from the armies, announcing battles on the Rhine or Euphrates, or insurrections in Spain or Gaul.'

Among the numerous temples that once adorned the ancient capital of the world, the Pantheon and the temples of Vesta, Peace, Fortuna virilis, and Bacchus, present extensive and very interesting remains; but incomparably finer than all the rest is the Pantheon (in the ancient *Campus Martius*), which, though stripped of its external ornaments, and disfigured by two modern belfries, erected by Bernini, is entire within. This exquisite temple was built, as Pliny states (Hist. Nat., lib. xxxvi. cap. 15), and as the inscription on the portico testifies, by Agrippa, the friend and general of Augustus, who dedicated it to Jupiter the Avenger, *Jovi ultori*. It is a perfect circle, 180 ft. in diameter.

'Relic of nobler days and noblest arts!
Despoiled, yet perfect, with thy circle spreads
A holiness appealing to all hearts—
To art a model.'

Its beauty consists in its admirable proportions; and its portico, 110 ft. in length by 44 ft. in depth, supported by 16 Corinthian columns of white marble, has a most majestic appearance. The dome is of great extent, and has a central aperture, from which the building receives its

entire light. The Pantheon has been stripped of everything that could be taken away, in order to furnish materials for the embellishment of St. Peter's. It is now made the receptacle of monuments to those who have deserved well of their country, and contributed to sustain the reputation of Italy.

The great wonder of ancient Rome, however, is the Flavian amphitheatre, now the Coliseum, or more properly Colosseum, unquestionably the most august ruin in the world, and by far the largest amphitheatre of which there is any knowledge.

'Omnis Casareo cedat labor amphitheatro,
Unum præ cunctis fama loquatur opus.'

Martial, de Spect.

It consists of a vast ellipse, the length of the longest diameter measured from the outside of the outer wall being about 620, and that of the shortest 513 ft., so that it covers about $5\frac{1}{4}$ Engl. acres of ground. The longest diameter of the arena has been variously given at from 287 to 300 ft., and the shortest at from 180 to 190 ft.; the space between the arena and the outer wall (from 160 to 167 ft.) being occupied by the walls, corridors, and seats that rose tier above tier from the wall round the arena, nearly to the top of the outer wall. The latter, which is about 179 ft. in height, consists of three rows of vaulted arches rising one above another, exclusive of which it had, when perfect, upper works of wood. This colossal amphitheatre is said to have had seats for 87,000 spectators, and standing room for 20,000 more. There is really, therefore, but little of exaggeration in the statement of Addison, that the amphitheatra.

—'on its public shows unpeopled Rome,
And held, uncrowded, nations in its womb.'

The arena was sufficiently extensive for the exhibition, on the grandest possible scale, of the bloody sports that delighted the ancient Romans; and here hundreds, and even thousands, of gladiators and of wild beasts have frequently contended at once.

'Butcher'd to make a Roman holiday.'

This magnificent ruin has been much damaged by earthquakes, lightning, and the destroying influence of time; but it has suffered incomparably more from the injuries inflicted upon it by the successive masters of Rome. In the 12th century it was occupied as a fortress; and in the course of the next century it became, what it long continued to be, a common quarry, whence materials were taken to build a large portion of the modern city. In consequence of these lengthened devastations, not a single step is now remaining of all the seats of stone which rose in regular succession from the arena; but the wall which surrounded it, to prevent the escape of the wild beasts, is nearly entire. The interior presents a most complete scene of destruction. By means of broken staircases, the traveller may climb up a considerable height, and be almost lost in the labyrinth of ruins. It is from such a view of these remains that the best idea of their vastness is formed; and if viewed by moonlight, when the shattered fragments of stone, and the shrubs which grow upon them, are seen at a distance in alternations of light and shade, the mind receives mingled impressions of gratification and melancholy which, perhaps, no other prospect in the world could produce. At length, however, an end was put to the spoliation of this most splendid relic of imperial Rome. Benedict XIV. consecrated the spot which persecution and fable had stained with the blood of so

many Christian martyrs' (Gibbon, xii. 455.) And subsequent pontiffs have repaired and strengthened portions of the existing ruin. 'The pile,' says an English traveller, 'speaks powerfully to the imagination, through the bloody rites once celebrated in it. It was the scene of those savage fights of gladiators, those combats of wild beasts which were unknown among other ancient nations, and have fixed a brand of infamy on the Roman name. The interior has been carefully cleared out, and the boundaries of the arena which was so often soaked with blood are distinctly seen. When we stand among the broken arches of this vast edifice, now the abode of bats and owls, silent as the grave, and with not a single building near it, our thoughts are irresistibly carried back to the thousands of all ranks and both sexes who once filled its ample benches, to the roars and yells of the wild animals lacerating each other, the shrieks of the slaughtered human beings, and the shouts of the blood-thirsty multitude now applauding the blow which took away a fellow creature's life, and now calling out for fresh victims. These cruel exhibitions were characteristic of Rome, both republican and imperial. The Greeks, wherever they established their power, carried with them the elevated sentiments and graceful mirth of the stage; and you may trace the dominion of the Romans over the ancient world, by the amphitheatres built for the gratification of their ferocity.'

The Romans, always fond of shows and games, were especially attached to those of the Circus.

— 'Dnas tantum res anxius optat,
Pancin et Circenses.'

Juvenal, Sat. 10, v. 81.

There are said to have been at one time no fewer than 15 circuses in the city and its environs. The principal of which were the Circus Maximus, Circus Agonalis, and the circuses of Nero and Caracalla. Of the Circus Maximus (which Ammianus Marcellinus describes as being at once 'the temple, the dwelling-house, the public meeting, and all the hopes of the ancient Romans') there are now no remains; but Pliny informs us that it was capable of accommodating 260,000 spectators; and Juvenal, using, perhaps, a poet's licence, goes the length of saying,

'Totam hodie Romam Circus capit.'

The form of the Circus Agonalis (supposed to have been built by the Emperor Severus) may be traced in the Piazza Navona; and even the round end is not lost: it is about 750 ft. in length; and the races held here during the Carnival forcibly remind us of the uses to which it was formerly devoted. The Circus of Caracalla, outside the gate of San Sebastian, has its walls still entire, though the seats have fallen in, leaving a kind of terrace along the whole length of the walls. It appears to have been 1,678 ft. in length, 435 ft. in width, and to have been capable of accommodating 20,000 spectators. Of the other Roman ruins (excepting those of the Forum and Capitol), the two columns of Trajan and Antonine, and the three triumphal arches of Titus, Constantine, and Severus, principally deserve attention, from their beauty and the taste displayed in their execution. The column of Trajan, erected to commemorate that emperor's successes in Dacia, is 115 ft. 10 in. in height, not including the statue of St. Peter, which Sixtus V. had the bad taste to substitute for that of its illustrious founder. A spiral staircase leads to the balustrade at the top; and the exterior is adorned with sculptures in basso relievo, spirally arranged round the column, representing

the victories and achievements of the emperor. Napoleon's pillar at Paris is a good imitation of that of Trajan. The pillar of Antonine (or, more correctly, of M. Aurelius, for he erected it), in the Piazza Colonna, is 122½ ft. high, and is now surmounted by a colossal statue of St. Paul; the bas-reliefs, similarly arranged to those on the other column, are not nearly so well executed, and the whole is much injured and defaced. The arch of Titus, built to commemorate his victories over the Jews, consisting of a single arch, was adorned with eight marble columns of the Composite order, and had its interior covered with sculptures, representing the emperor's triumph after the capture of Jerusalem; but it is in a state of great dilapidation, many of its rich decorations having been carried off to embellish the Farnese and other palaces: latterly, however, some attempts have been made towards its restoration. Till the time of Sixtus IV., the bas-reliefs were not visible, so much had the soil accumulated and buried the arch; but that pontiff ordered it to be excavated; and there is now a clear passage under it at the level of the ancient pavement, and, perhaps, on the pavement itself. The arch of Constantine, at the foot of the Palatine Hill, near the Colosseum, is the most noble, because the best preserved structure of the kind in Rome; but it is indebted for its chief beauty to the spoliation of the arch of Trajan, which stood in the forum of that emperor, and which the senate, with equal barbarism and servility, stripped of its bas-reliefs and other rich materials, employing them to ornament the new structure. It consists of a large arch between two of smaller size, having on each side 4 fluted Corinthian columns of giallo antico supporting the figures of Dacian captive warriors. It is covered with the bas-reliefs taken from the arch of Trajan, and with others of later date and of very inferior execution. The soil, which had accumulated round this arch, was excavated in 1804, when part of the *Via Triumphalis* was brought to light. The grass-grown platform at the top was once, probably, occupied by the victor in his triumphal car; but this has disappeared. We have already stated, that the paltry gateway in front of Buckingham Palace is a wretched miniature imitation of this arch. (Lumsden's Ancient Rome, 327.)

The Capitoline Hill, 'that rock of triumph, that high place where Rome embraced her heroes,' naturally kindles a feeling of enthusiasm; but of the topography of the ancient Capitol we really know next to nothing. 'Four temples, 15 chapels, 3 altars, the great rock, a fortress, a library, an atheneum, an area covered with statues, the enrolment-office, all these are to be arranged on a space 400 yards in length and 200 in breadth; and of these, the last only can with precision be assigned to the double row of vaults crowded with salt, where the inscription of Catulus was discovered. The citadel may be believed to have extended along the whole side of the hill.' (Hobhouse's Illustrations of Childe Harold.) But, however little be known of the precise position of these ancient buildings, here was situated the *domus de canna straminibusque*, which passed for the house of Romulus, and was preserved with religious care till the time of the emperors: here the Roman people celebrated their most sacred rites, and kept their treasures, archives, trophies, records, Sibylline books, and other valued relics; and here 300 conquerors, in the space of 1,000 years, deposited their spoils and consummated their glories, by the grand spectacle of a triumph. (Maclaren, p. 161.) The Roman forum, however, is, perhaps, the most melancholy object within the walls of 'the eternal city.' Its former grandeur is utterly annihilated;

the ground has been applied to other purposes, and even the exact position of its various parts is much disputed, though it is probable that excavations, judiciously conducted, would set the question at rest. The Forum, as described by Bunsen, the Prussian envoy, who took great pains on its investigation, appears to have been of no great size (about two acres), and to have owed much of its magnificence to the temples, basilicæ, curiæ, and other buildings that surrounded it. Indeed it was in consequence of its inadequate size, that Julius Cæsar built a new one. Augustus, Trajan, and other emperors, followed his example, and Rome had ultimately a multitude of forums. But though the ancient Forum Romanum and present Campo Vaccino is so desolate that we might apply to it Virgil's description of its appearance before the arrival of the Trojan settlers (*Æneid*, viii. 360):—

——— 'passim armenta videres
Romanoque foro et laetis mugire Carinis,'

the classical scholar turns with more pleasure to the pages of Byron:—

'The Forum, where the immortal accents glow,
And still the eloquent air breathes, burns with Cicero!
The field of freedom, faction, fame, and blood;
Where a proud people's passions were exhaled
From the first hour of empire in the bud
To that when further worlds to conquer failed.'

The forums of Augustus, Trajan, and Nerva were laid out near the foot of the Capitoline Hill, close to, though separated by buildings from the Forum Romanum; and southward rises the Palatine Hill, on which was built that mere village or collection of huts of which the masters of the world, in the days of their grandeur, loved to speak as 'the cradle of their empire—the acorn, whence sprung the mighty oak that overshadowed the world.' Cicero had a house here, and the brick ruins are still extant of the golden palace of Nero; but at present this spot, which once lodged the whole Roman people, is occupied by a single villa, surrounded by vineyards and gardens. All the more conspicuous monuments above described belong to the imperial times, for scarcely a shred remains which can be referred with certainty to the ages of the Republic. The principal exceptions are the Tullian prison, comprising two dungeons, perfectly dark, and built with huge blocks of stone, answering, in all respects, to the striking description given of it by Sallust (*Bell. Catalin.* cap. 55): there are also two ancient tombs (one of which belonged to the Cornelian family, and contained the bones of the Scipios); and the Cloaca Maxima already mentioned; but these structures have little beauty, and derive their interest almost exclusively from classical associations.

Population of Ancient and Modern Rome.—It is extremely difficult to arrive at any just conclusions with respect either to the population of Rome, or of any other of the great cities of antiquity. Generally it has been exceedingly exaggerated. The great actions of the Romans, the vast extent of their empire, and the magnificence and splendour of their capital, the original seat of their power, seem naturally enough to lead to the conclusion that its pop. must have been immense. The strong national spirit of the Roman writers led even the most cautious among them to magnify the power and importance of the eternal city, which were exaggerated beyond all bounds by orators and poets, anxious to gain the favour of the public by flattering their prejudices, and exalting their power and greatness. The statements, too, of the classical writers as to the pop. of Rome and other great towns, are not only in themselves very

vague, but, being extremely liable to mistakes in copying, have, no doubt, in many instances, been magnified by copyists and others, always prone to exaggerate what is really great, and of which they have no distinct knowledge. And, in addition to this, all enquiries into the pop. of Rome, Athens, and other ancient cities, are rendered peculiarly difficult from the circumstance of the returns of the censuses, and the statements in the classical authorities founded on them, usually or always referring to such free citizens only as were capable of bearing arms, without including children or slaves, though the latter formed in most instances a large, if not the largest, portion of the pop. Various statements have been put forth with respect to the pop. of Rome. The exaggerations of Vossius, Lipsius, Châteaubriant, and others, who give to imperial Rome 14, 5, and 3 millions of inhab., are too absurd to deserve notice. Hume, who in his masterly 'Essay on the Populousness of Ancient Nations,' has discussed the question of the pop. of Rome with his usual learning and good sense, arrives at the conclusion that Rome, when in the zenith of her greatness, might have been about as populous as London in 1760: in other words, that she might then have had from 700,000 to 800,000 inhab. Gibbon estimated the pop. at 1,200,000 (*v.* 286, 8vo. ed.); but it would appear that the more moderate estimate of Hume is the more accurate, though the probability is that even the latter is beyond the mark. It appears from the very learned and elaborate researches of M. Dureau de la Malle (*Economie Publique des Romains*, liv. ii. cap. 10), that the area of Rome, included within the walls of Aurelian, which have been traced and laid down with the utmost precision, amounts to very near 1,396½ hectares, that is to about 3-5ths the area of Paris; and the fair presumption is, from the numerous forums and other open spaces in Rome, the number of the public buildings, and the great magnitude of many of the private residences, that its pop., as compared with that of Paris, would be in a still less proportion. To the pop. within the walls has, however, to be added that of the suburbs, the amount of which is the subject of elaborate enquiry by the same learned critic. On the whole, he concludes, apparently on good grounds, that the pop. of imperial Rome, including its suburbs, in its most flourishing period, may be fairly estimated, allowing for troops and strangers, at between 560,000 and 570,000. It is probable that this estimate is very near the mark. And how small soever it may appear when contrasted with the statements that have been long current as to its vast magnitude, a pop. of 600,000 is really immense for a city like Rome, without either manufactures or trade, and the inhabs. of which chiefly depended for subsistence on the gratuitous distribution of the corn supplied by the conquered provinces.

During the troubles that devastated Italy, and especially Rome, from the 5th to the 13th century, the pop. of the city rapidly declined, and did not exceed that of a third or fourth rate town of the present day. But from the 14th century it began again to increase; and in the 'golden days' of Leo X., it is supposed to have amounted to about 85,000. Towards the middle of the 17th century it was estimated at 90,000. In 1709 the inhabs. amounted to 138,568; in 1740 to 146,080; in 1765 to 161,899. (*Gibbon*, xii. 429.) But, owing to the influence of the French occupation, they had fallen off, in 1821, to 146,000, exclusive of Jews. It has, however, again increased; and at the last census, in 1863, as already stated, the pop. numbered 201,161 souls. According to these census returns, the city contained—exclusive of

the fluctuating population of visitors—among its population 84 cardinals, 36 bishops, 1,457 priests and clerks, 867 seminarists, 2,569 monks, 2,031 nuns, 660 male collegians, 1,674 female inmates of schools, 947 male inmates of charitable institutions, 1,180 female do., 40,827 families, 92,024 men, 87,819 women, 30,235 married men, 28,201 married women, 4,301 widowers, 9,447 widows, 59,015 bachelors, 50,171 spinsters, 5,175 soldiers, 387 prisoners. The heterodox population in 1863, was only 311, but there were 4,490 Jews.

The *inhabitants*, generally, are of a very mixed race; and it would be absurd to suppose, after so many changes, that they possess any considerable portion of ancient Roman blood. The men of the working and middling classes are generally stout and good-looking, though what are called Roman faces seem to be rarer than in England. The women, though good-looking when young, soon become coarse; and, being large-boned, have a haggard appearance on losing their plumpness in old age. The men wear hats with crowns like a sugar-loaf, very wide cloaks wrapping round and round like a Scotch plaid; pieces of cloth tied about the legs with cords, instead of stockings, and sandals in lieu of shoes. The women generally wear a scarlet spencer with sleeves; and, for a head-dress, a piece of white linen, thickened on the crown by numerous folds, and with the end hanging down behind to the shoulders. Want of cleanliness is a common vice. The streets, public places, houses, and persons of the bulk of the pop. would all be improved by scrubbing, washing, and combing. Some of the most interesting objects are inaccessible from the accumulation of filth; and the appearance of the monks is absolutely disgusting: they are not redolent of holiness, but of dirt and vermin.

The cardinals and bishops being (under the pope) the rulers of the country, constitute the court-party, and claim the highest rank, after whom come the lay-nobility, subsisting on the revenues of their estates. The priesthood, as before stated, forms a very numerous portion of the inhabs. The civil nobility, with a few exceptions, are few in number, poor, and without power or influence. The lawyers, who are divided into 4 classes (corresponding nearly with king's counsellors, barristers, attorneys, and notaries), form a pretty extensive section. After them rank the artists, a very numerous body, with a good deal of influence in society; and next to these are the *mercanti di Campagna*, a wealthy class, who farm extensively, and have warehouses at Rome for the sale of their produce. Rome has about 5,500 shops; but their owners, with some few exceptions, rank below the classes above described. The foreigners, a mixed multitude, among whom the English and Russians are the most numerous, and generally speaking, the best informed, constitute a class of themselves; enjoying also, in consequence of their wealth, many peculiar privileges. The police exercises no inquisitorial powers; and, foreigners may live as they please without attracting attention, and do, with impunity, what would not be permitted to natives. To this circumstance, as well as to the fascinations of antiquity and modern art, we may attribute the visits of foreigners; for, of the English at least, a large proportion are led by motives very different from a love either of the fine arts or classic lore. With respect to morals, it is admitted on all hands that they are extremely lax. The common people are intelligent and obliging, but passionate; and, on the slightest provocation, strike at each other with knives. Revenge and jealousy often lead, among the lower orders, to assassinations; rendered more frequent

by the almost perfect impunity with which they may be committed. The statements as to conjugal infidelity are, perhaps, exaggerated; though the circumstances under which society is placed, the swarms of priests, monks, and others, having no excitement but that of intrigue, leave no doubt as to the prevalence of licentiousness, and the general corruption of morals. The modern Romans are prone to falsehood. 'They never speak truth,' says Mr. Maclaren (Notes, p. 82), 'at the expense of their own interest; and in the courts it is asserted that any quantity of false evidence may be got for money. Cheating, in all its forms, is practised by high and low; and provided it be cleverly done, and successful, they feel a pride in telling it. The judges and functionaries of all kinds have the reputation of being very corrupt. The higher classes are slaves to their vanity, and their indolent pleasures; the lower to the most abject superstition. This character, however, chiefly belongs to the past or passing generation. A large proportion of the young Romans in the middle and upper classes are described as liberal, gentlemanly, and honourable; but they, and indeed the educated classes generally of all ages, are deists. They speak with contempt of the mummeries and pious frauds they daily witness, but go once a year to confession in order to avoid scandal. The Romans have, however, their redeeming qualities: they are very sober, social in their habits, fond of their children, and obliging to strangers. There is no town, perhaps, where foreigners feel so much at ease. They may dress as they please, live as they please, and indulge in all their personal tastes and eccentricities, without being annoyed, or even stared at. In private lodging-houses strangers often meet with much genuine and gratuitous kindness. Many of their vices may be ascribed to the operation of a bad political system on minds naturally acute and active; for falsehood, hypocrisy, and craft are the natural fruits of a government which crushes liberty of thought.'

The manners of the upper classes are indicative of extreme indolence. They rise late, and are never to be seen until four in the afternoon, when they take a drive up and down the Corso, which, narrow as it is, may be termed the Hyde Park of Rome; after which they resort to *soirées* in private houses, for the theatres are open only during the carnival. To walk in Rome is quite unfashionable, and a carriage of some kind or other is indispensable, even to those of the noblesse or gentry whose limited income denies them a comfortable meal. Dancing, conversation, and cards are the chief evening amusements; dinner parties are almost unknown; and suppers are only given on great occasions. In the month of May, all the inhabs. that can afford it go to the country for 2 months, and again in October for the same period, the air of the Campagna being then purified by the rains of April and September. On these occasions they hire a house or lodging in one of the petty towns 10 m. or 15 m. from Rome; and their principal amusement during their *villeggiatura* consists in fishing and bird-catching; the chase, in any of its forms, being little followed.

The public amusements consist of theatrical representations, concerts, and religious ceremonies, with occasional frolics at the carnival and other festive seasons. There are three theatres, two of which, the opera seria and opera buffa, are open during a great part of the year; but the performances are of a very mediocre description; the concerts have little to recommend them, and, among the people at large, music forms but a small part of their enjoyment, though a few wandering harpers (*carciofulari*) may sometimes be found

trying to inspire them with the love of sweet sounds. An amphitheatre (*correa*) for bull-fights, tumbling, and horse riding has been formed out of an ancient mausoleum of Augustus, and when open is a favourite resort. The carnival would require some space for its description in detail: it may be sufficient here to observe that in its license and intrigue, its unbridled mirth, and its leveling of rank; nay, even in the season of its celebration, it bears an obvious resemblance to the Roman Saturnalia; but it approaches, perhaps, more closely to the feast of Cybele, when, according to Livy (xxiv. c. 14), the richest draperies were hung from the windows, masquerading took place in the streets, and every one, disguising himself as he pleased, walked about the city in jest and buffoonery. If the historian had informed us in addition that one of the principal amusements was a promiscuous pelting of sugar-plums or chalk stones, he would have furnished a precise picture of the modern carnival. Religious festivals are very frequent, but occur oftener between Advent and St. Peter's Day than at other seasons. The pope celebrates mass and confers his public benediction in St. Peter's on Christmas Day, Easter Day, Whit-Sunday, and other festivals, on which occasions the solemnities are unusually grand, and attract immense crowds to the church.

The exhibition of the illuminated cross has been already mentioned. The illumination of the exterior of the church is also very imposing; the appearance of this immense building, with its dome, lantern, and cross all lighted with large paper lanterns, has a most striking and magnificent effect, which, however, is much heightened when, at a given signal, thousands of globes and stars of vivid fire, suddenly ignited, as if self-kindled, blaze in a moment into one dazzling flood of light, all over that vast structure. Immediately after the above display, on the night of St. Peter's Day, follows the Girandola, an exhibition of fireworks, from St. Angelo, which is generally admitted to be superior to any other of the kind in the world. These festivals cost the papal treasury about 15,000 crowns a year.

The wretched state of literature and education in modern Rome has been noticed already under Papal States. The city has, indeed, a university, a college, and numerous public schools; but they either afford no instruction in the higher branches of literature and philosophy, or such only as is of the worst possible description. All foreign publications that might tend to expand and enlighten the public mind are rigidly excluded; all native works must be submitted to the revision of the licensers; and the only literary pursuits that meet with any encouragement are those having reference to antiquity and the fine arts, and even they feel the paralysis that affects the other and nobler branches of study.

Rome has numerous *charitable institutions*, the total annual revenue of which amounts to between 800,000 and 900,000 dollars, half of which comes from the papal treasury, the rest being supplied by endowments or voluntary contributions. But, however large is the number of these establishments at Rome, a great proportion of them are of doubtful, ill-directed, and even pernicious charity. Not to speak of the foundling hospitals, or those which offer a premium to idleness and thoughtlessness, there are thirteen societies for giving doweries to girls on marriage, and pecuniary gifts on taking the veil; and of 1,400 women married here in a year, 1,000 avail themselves of these societies. There is also much private almsgiving, especially by the pope, who thus spends about

35,000 crowns a year. The consequence of this indiscriminate charity is seen in the mendicancy, squalor, wretchedness, idleness, and want that is seen at every step in the streets of Rome. There are in the city twenty-one establishments for the diseased, insane, and convalescent, of which eight are public and eleven private hospitals, accommodating, on the whole, about 4,000 patients; the average mortality is about 7 per cent. There are also eight foundling hospitals, in which are nearly 4,000 children of both sexes. In fact, Rome is one of the great recipients for abandoned children, brought thither from remote provinces, and even from Naples. The mortality in these hospitals is absolutely frightful, upwards of 72 per cent.

The city is governed by an ecclesiastical governor and a council (*sacra consulta*) appointed by the pope; and though there be a *senator*, or civil governor, he enjoys only the name without its authority; and the title has, for many years, been conferred exclusively on a native of another Italian state, as it has not been thought safe to entrust it to a Roman. The police of the city consists of about 4,000 carabinieri, somewhat similar to the *gens d'armes*; but the inefficiency of this body, which is said to be even more imbecile than the old town-guard of Edinburgh, is proved by the frequent robberies and assassinations committed with almost total impunity.

Rome, though the chief manufacturing city of the Papal States, has no manufacture deserving much notice. The principal are silk and woollen goods, especially velvets, brocades for the clergy, and the more expensive kinds of silk goods. Hats of very good quality are made here to the value of about 200,000 crowns a year. The manufacture of mosaics and jewellery of an extremely varied character occupies a great number of hands, and many also are employed in making casts or imitations of antique models. Leather, and prepared skins, gloves, parchment, strings for musical instruments, glue, glass bottles, are among the other articles manufactured in the city; but they are of no great importance, and, with the exception of works connected with the fine arts, all the manufactures are conducted in the most clumsy manner. The hospital of St. Michael has the privilege of furnishing cloth for the apostolic palaces and the pontifical troops. None but national wool is employed in the manufacture: the spinning is done by hand, chiefly by women in the prisons; the warping is effected also by manual labour; and it is made a boast that no machinery is employed where the work can be done without it. The establishment has 25 looms, employs 850 persons, and produces about 77,500 yards a year of the most costly, if not the best, cloth produced in Europe. Manufactures of some kind or other are carried on also, chiefly by hand-labour, in twelve conservatories, containing about 600 inmates.

A great discrepancy of opinion has prevailed with respect to the climate of Rome. The fact, however, seems to be, that wherever the houses are few, and the ground is mainly covered with gardens, fields, or ruins, malaria is felt during the summer months, though not in the same degree as in the open country outside the walls. This is the condition of the greater part of ancient Rome, of all the districts E. and S. the Quirinal and Capitol, so that five of the seven hills are either wholly or partially unhealthy. The upper part of the Pincian Hill, the road towards the Porta Pia, and the space between the baths of Diocletian and the Porta San Lorenzo, are also considered unhealthy; and there are districts of the same character hardly inhabited, having a convent here and there, the rest being laid out in gardens and

vineyards. West of the Tiber, the district of Lungara is unhealthy. The more densely peopled parts, on the contrary, are sufficiently healthy; and it may be said with truth, that *modern Rome*, which extends from the Quirinal and the Capitol to the banks of the Tiber, is generally free from malaria. There are unhealthy seasons in Rome, as in most other cities, and in particular years epidemic fevers prevail to a fearful extent in the dirty and densely peopled districts; but these have no connection with malaria, being attributable rather to the absence of sewerage, and the filthy habits of the lower orders. The temperature of the city is generally mild and genial. Frosts are not frequent, and though snow falls occasionally, it seldom lies on the ground more than a single day. The *tramontana*, however, a piercingly cold N. wind, sometimes blows for days together. Rains are frequent and heavy in November and December; but fogs are rare. In summer the heat is often oppressive, especially during the prevalence of the *sirocco*. In summer, the hour after sunset is considered the most unwholesome period of the day, and then people generally avoid exposure to the air.

History.—The *history* of Rome, which includes, for many centuries, that of all the countries washed by the Mediterranean, and, at a later period, that of the Western Christian church, is far too extensive to allow of any considerable details here. Its foundation is hidden in the obscurity of an age respecting which few records remained in the time of its historians; and the investigations of Beaufort and Niebuhr have thrown much doubt on its early traditional history. Chronologists, however, are pretty well agreed in assigning its foundation to Romulus, its era, according to Varro, being 753 years B. C. According to the account of Livy, the founder was succeeded by 6 other monarchs; and the constitution during the kingly period was an *elective* monarchy, with a king, senate, and popular assembly, the king being, at the same time, chief magistrate, high priest, and commander of the army; though, in point of fact, as his election depended on the voice of the comitia, the 'people' were the real source of power. The senate originally consisted of 100 members, to whom, in course of time, others were added. The comitia comprised the burghers only, and the decrees of the senate required their approval before they became law. The Romans during this period being successful in war, added considerably to their previously confined territory. The public and private vices of Tarquinius Superbus led (*anno* 510 B. C.) to the abolition of kingly government, and the establishment of the republic, under 2 consuls, annually chosen, originally from the patricians only, but afterwards from either patricians or plebeians. The temporary ascendancy of the patrician party effected the institution (B. C. 500) of the dictatorship, by which, on extraordinary emergencies, the whole power of the state was committed to a single individual, who might act with despotical authority. In the sequel, after many delays, and much opposition, officers called tribunes were appointed by the people, who had a *veto* on the proceedings of the senate. The constitution was thus founded on the principle of a distribution of power between the aristocracy and the commonalty; and in this state it remained without any considerable change to the end of the Punic wars, the empire of Rome being in the meanwhile extended over Italy, Sicily, Corsica and Sardinia, the N. coast of Africa, and part of Spain. Amid these successes the distinction of patricians and plebeians seemed to have disap-

peared; but the unequal distribution of the public lands, or of those conquered by the arms of the republic, led to new, protracted, and bloody struggles between the patricians, who had appropriated to themselves the lion's share of these lands, and the plebeians, who sought to bring about their more equitable division. This occasioned the introduction by the latter of an *AGRARIAN LAW*; not, however, meaning by this, as is commonly understood, a law to interfere with or to effect an equal distribution of private property, but merely a law to limit the extent of the public lands held by individuals, and to subject them to a real and not a nominal rent. (See Niebuhr, ii. *passim*.)

The history of the intestine troubles of Rome during the long protracted contests respecting this law, and the extension of the franchise to all Italian subjects and allies of Rome (the latter of which led to the Social War), would lead us into details quite unsuited to the nature of this work. It is sufficient here to state that the principle of representation not being adopted in the Roman constitution, it could not long survive, after the extension of the franchise to the Italians in general. The deliberations of the city assemblies were henceforth liable to be controlled by an influx of citizens from a distance, and full scope was given for the exercise of all sorts of corruption and intimidation. The soldiers, too, after they had carried their victorious arms beyond the boundaries of Italy, gradually ceased to pay their accustomed deference to the orders from Rome, and began to regard themselves rather as the servants of the generals by whom they were commanded, and to whom they looked for advancement, than of the republic. In consequence, the whole power of the state came to be engrossed by the great military leaders; and Marius and Sylla, Pompey and Caesar, Marc Antony and Augustus, were successively masters of the Roman world. The battle of Actium (*anno* B. C. 80) threw the whole power of the state into the hands of Augustus; and the public, weary with intestine wars and revolutions, were glad to enjoy tranquillity under his supremacy. The *imperator*, who had previously been merely the commander-in-chief, now began to concentrate all the powers of the state in his own person. He became, in effect, perpetual dictator, and held the sovereign power free from all constitutional responsibility. The senate, indeed, continued to exist under the emperors and the praetors or judges retained their names; but the decrees of the former were recommended, or rather dictated, by the emperors, and the *edicts* of the latter were superseded by summary decrees called *constitutiones principum*. In this state the government of Rome remained about 400 years. The succession depended partly on the will of the reigning emperor, who sometimes appointed his successor, either by adoption, or by giving him the title of Caesar. In the event of no successor being named by the previous emperor, the right of election devolved on the senate; but it was frequently usurped by the army and by the Praetorian guards; and sometimes rival emperors were chosen by the senate and the army, or by different armies, the pretensions of the candidates being decided in the field. Under such circumstances, and considering the degraded state of the Roman people, enervated by indolence, and corrupted by largesses, immunity from taxes, and indulgence in public shows, it may well excite surprise that the empire did not sooner fall to pieces.

Some speculative inquirers have classed the circumstance of the imperial dignity being elective among the causes that contributed to its decline;

whereas it really appears to have been almost the only principle that enabled it to survive so long. In a government like that of Rome, where every thing had to be transacted directly by the emperor, a hereditary monarchy, which supposes the occurrence of minorities, was out of the question. And how unworthy soever the means by which some of the emperors arrived at the imperial dignity, not a few of them owed it to their superior ability. Nerva, Trajan, the two Antonines, Severus, Aurelian, and other able princes, gave new vigour to the tottering fabric, and prolonged its existence.

At the close of the 4th century, the Roman dominions, which still extended from Britain on the W. to the Euphrates on the E., were divided between Honorius and Arcadius. At this time, too, the barbarians, sensible of the growing weakness of the Romans, began to harass the empire with incessant hostilities, and one country after another was lost, till at length Italy itself was invaded by the Huns, and shortly afterwards by the Heruli, whose general, Odoacer (A. D. 476), dethroned the impotent Romulus Augustulus, assumed the title of *rex*, and fixed his residence in Ravenna. Thus fell the greatest empire of the world, exactly 1,229 years after its supposed foundation by Romulus. Odoacer gave way to Theodoric, king of the Ostrogoths, and during his reign Rome and all Italy enjoyed a period of peace and prosperity. But the calm was only temporary; Belisarius, the general of Justinian, and Totila the Ostrogoth, successively took Rome, which was stripped of some of its most splendid monuments, at the same time that its inhabs. were reduced to a state of wretchedness which they had not before experienced. After having become a province, or *exarchate*, of the Eastern empire, Rome passed, in 774, under the dominion of the Franks, who retained it till the deposition of Charles le Gros, in 887; after which the possession of Rome and Italy became, during more than three centuries, the subject of contention between the emperors of Germany, the numerous states into which Italy had been parcelled, and the bishops of Rome, who with the title of pope assumed a right to temporal power. Nicholas III. at length obtained from Rodolph of Hapsburg, in 1278, the grant of an independent territory, called the States of the Church; and thus began the sovereignty of the popes, which, with some interruptions, has continued to the present day. (Further details respecting this part of Roman history will be found under the head, PAPAL STATES.)

ROMFORD, a market town and par. of Essex, in the liberty of Havering-atte-Bower, on the high road from London to Norwich, 18 m. ENE. London, and 16 m. SW. Chelmsford, on the Great Eastern railway. Pop. of town 4,361 and of par. 6,604 in 1861. Area of par. 3,340 acres. The town consists principally of a long wide street along the high road, having near its centre the market-house and town-hall, in which are held the petty sessions for the liberty. The church is an ancient structure consisting of a nave, chancel, and N. aisle, with a tower at the W. end. The living is a curacy subordinate to that of Hornchurch, in the patronage of New College, Oxford, value 54*l.*, besides which the curate receives an annual stipend of 200*l.* The Wesleyan Methodists and Baptists have places of worship, with attached Sunday schools; besides which there is a national school, partly endowed and partly supported by subscription. The town has also several almshouses and benefactions for the poor. At a little distance from Romford are cavalry barracks, erected in 1795, but now disused. The inhabs.

are chiefly retail dealers, or persons employed in market gardening and agriculture. The town derives its principal advantage from its situation on the London road, and more recently from being one of the stations on the Great Eastern railway. It is also one of the polling places for the S. div. of Essex. Markets, especially for calves, well attended, on Mondays, Tuesdays, and Wednesdays; fair, June 24, for cattle and horses.

ROMNEY (NEW), a cinque-port, decayed bor. market town and par. of England, co. Kent, lathe Shepway, partly in lih. Romney Marsh, and partly in hund. St. Martin's Pountney, 19 m. SW. Dover, and 58 m. SE. London. Area of bor. and par. 2,320 acres. Pop. 1,062 in 1861. The town, which arose out of the ruins of Old Romney, was formerly in a comparatively flourishing condition, being a considerable sea-port; but the haven has for many years been completely filled up. It consists at present of a broad principal street crossed by one of inferior size, in which is the town-hall. Houses chiefly of brick, the market-house and town-hall being modern erections. The church is a spacious structure, consisting of a nave, aisles and chancel, partly Norman, and partly in the pointed style, with a large and curious tower at the W. end: the living is a vicarage in the patronage of All Souls' College, Oxford, of the nett value of 161*l.* a year. The Wesleyan Methodists have a small chapel, and there are 2 Sunday schools, besides a free school and almshouses. The inhabitants, with a few exceptions, are employed in grazing cattle on Romney Marsh, a rich tract of land, extending about 7 m. N. and W. from the town, and comprising about 47,000 acres, with a pop. of 5,708 in 1861. This tract is defended from the encroachments of the sea by an immense embankment called Dymchurch Wall, along which is a good road for carriages: this sea-wall is kept in repair by a rate levied on the proprietors of the marsh. The sheep depastured here furnish long combing wool.

New Romney is a bor. by prescription, and returned 2 mems. to the H. of C. from the reign of Edward III. down to the Reform Act, by which it was disfranchised. It was not considered of sufficient importance to be included in the provisions of the Municipal Reform Act; but it still retains certain privileges reserved in that act for the Cinque Ports. Old Romney, 2 m. W. the town, has now only a few houses surrounding the church, with a pop. of 151 in 1861.

ROMORANTIN, a town of France, dép. Loire-et-Cher, cap. arrond., on the Sèvre (a tributary of the Loire), where it receives the Morantin, 24 m. SE. Blois. Pop. 7,642 in 1861. The town was formerly the cap. of Sologne, and was embellished by Francis I. It has an old castle, a spacious prison, a theatre, courts of original jurisdiction and commerce, and some manufactures of woollen stuffs and yarn. Romorantin was taken by Edward the Black Prince in 1356. Cannon appear to have been used in the siege: but this, though one of the earliest, is not, as has been alleged, by any means the first occasion on which they were so employed. But it is better known in history, by giving its name to the edict of 1650, drawn up by the chancellor l'Hôpital, which gave to bishops, and took away from the parliaments, the power to try cases of heresy. It is said that the chancellor consented to this edict only to avoid a still greater evil, the establishment of the Inquisition.

ROMSEY, or RUMSEY, a mun. bor., market town, and par. of England, co. Hants, hund. King's Sombourn, the town being situated on the Test, a tributary of the Anton, on the Andover canal, 6 m.

NW. Southampton, and 80 m. SW. London, by London and South-Western railway. Pop. of bor. 2,116, and of par. 5,848 in 1861. Area of par., divided into Romsey-Extra and Infra, 9,310 acres. The town, which consists chiefly of a long and wide street, crossed by another at right angles, covers a considerable extent of ground. It has an audit-house, with a market-place beneath, and an old town-hall, in which petty sessions are held; but by far the most remarkable public building is the par. church. This interesting edifice is almost the only remaining portion of an abbey said to have been founded here by Edward the Elder. The present structure appears, however, to date from the beginning of the 12th century, and it is one of the most complete Anglo-Norman monuments in the kingdom. 'It is a cross church, with a low massive tower; the general exterior appearance is Norman, of very good character, and much of it unaltered. The W. end is early English, very plain outside, and its details accommodated to the Norman part; but the inside of this W. portion is a very fine specimen of the early English, rich rather by composition than minute ornament. The central portion and the transepts, with the sides of the chancel, are Norman, showing various singularities and mixtures of pointed and round arches.' (Rickman, *Goth. Arch.*, p. 176.) This church has a fine high altar, much good tracery, and stained glass; and a curious peculiarity is, that a large fruit-bearing apple-tree grows from its roof. The Presbyterians have a meeting-house in Romsey, and it has an almshouse, a charity school for 30 boys, and a free school. The corporation are trustees for several charities which, with the affairs of the bor. generally, appear to have been well managed. The corporation consists of a mayor, 6 aldermen, and 12 capital burgesses.

Sir William Petty, one of the most extraordinary men of his time, was a native of Romsey, where his father carried on the business of a clothier. He received his early education in the grammar school of his native town. After his death, on the 16th December, 1687, his remains were deposited in the par. church under a plain stone inscribed with his name.

RONDA, a city of Spain, in Andalusia, prov. Granada, on the Guadigro, 40 m. W. by N. Malaga, and 48 m. NNE. Gibraltar. Pop. 19,334 in 1857. The situation of the city is peculiar, being built on lofty rocks beetling over the river, across which, at an elevation of 200 ft. above the surface, are thrown two bridges, one of which consists of a single arch, 110 ft. in span, and surmounted by another bridge of three arches, at a much greater elevation. A third bridge crosses the stream somewhat above the town. The river is wholly unnavigable, and several cascades are formed close to the city. One portion, called the Old City, overhangs the S. cliff, and is encircled by an old embattled wall, built by the Saracens, and flanked by extensive outworks, while the more widely spread buildings on the opposite bank bear the name of *El Mercadillo*, or New Town. Within the fortifications stands the royal palace of Abou-Melic, the Moor, now a vast heap of ruins. The only entrance to the city is through a succession of gates, leading to a long and narrow, but tolerably straight street, running N. and S. for about $\frac{1}{2}$ m. to the upper or new bridge. This street is lined with handsome shops, and from it lead off both right and left numerous alleys, communicating with little courts and crooked passages, all of which, however, are lined with remarkably good houses. In fact, says Capt. Scott (*Ronda and Granada*, i. 103), 'this labyrinth is the Mayfair of

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Ronda, the aristocratic location of all the *Hidalguia* of the province, who, proud of the little patch of land won by the swords of their forefathers from the accursed Moslems, would as soon think of denying the infallibility of the pope as of taking up their abode among the mercantile inhabitants of the mushroom suburb, which, however, is beyond all comparison, the most agreeable place of residence.' The principal streets of the New Town are wide and tolerably straight: it contains some fine open *plazas*; and although the houses are thus more exposed to the sun, they enjoy a freer circulation of air. The absence of an enclosing wall tends also, in point of coolness, to give the *Mercadillo* an advantage over the city. It is nearly as difficult of approach, however, and as incapable of expansion as the walled city itself, for cliffs bound it on three sides, leaving the access free only on its N. side. The city has few public buildings except its churches, which are numerous, and gaudily fitted up; but they have neither paintings nor statuary of any merit. The New Town comprises a small, but commodious theatre, the stables of the *Real Muestranza* (or corporation of nobility for breeding horses), and the *Plaza de los Toros*, a circular covered building of stone, one of the handsomest in Spain, and capable of accommodating 10,000 spectators.

The inhabitants of Ronda are principally employed in agricultural and horticultural pursuits, though there are several manufactories of course woollen cloths and hats, two or three tanneries, and numerous water-mills. It is a place also of considerable commerce; its secluded, and, at the same time, central situation, making it a convenient depôt for smuggled goods, in which, indeed, the present trade of Spain mostly consists. A very large fair is annually held here in May for cattle, horses, sheep, and general goods: it collects an astonishing concourse of people from all parts of the country, and offers an excellent opportunity for observing the costumes and shades of character peculiar to the inhabs. of the different provinces. The neighbourhood is extremely picturesque, and produces an abundance of wine, oil, and corn, as well as the fruits and vegetables peculiar to a more N. climate. Cattle graze in large herds on the plains, and the hills abound with many varieties of game, including deer and wild boars. About 3 m. SE. of Ronda is the singular mountain, called *Cresta de Gallo*, consisting of two parallel ridges joined at the bottom, one red, the other white; both of them possess mineral riches, which, under a better system of national economy, might probably be turned to good account.

Ronda has been supposed, though perhaps with little foundation, to owe its origin to the Romans. Nothing certain, however, is known respecting it prior to the domination of the Moors, who made it one of their principal strongholds. In 1831 it became the court residence of Abou-Melic, son of the emperor of Fez, who erected the castle and fortifications. It was finally taken from the Moors by Ferdinand of Castile in 1485.

ROSCOMMON, an inland co. of Ireland, prov. Connaught, having N. Leitrim and Sligo, E. and SE. Longford, Westmeath, and King's County, from which it is separated by the Shannon, SW. and W. Galway, from which it is separated by the Suck, and Mayo. Area, 584,407 acres, of which 131,063 are bog and mountain, and 24,787 water. There are some mountainous tracts in the N. parts of the co., and elsewhere; but, speaking generally, its surface is nearly flat, exhibiting, for the most part, either green fields or bogs. Substratum principally limestone. Pastures most luxuriant. Stone fences, so common in Scotland, are in Ireland nearly

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peculiar to this co. Estates very large: many of them, however, are let on perpetual leases, the holders of some of which form an intermediate class between the great proprietors and the occupiers. A large proportion of land in pasture; but latterly tillage has been rapidly extending. Several improvements have been introduced both in the plan of husbandry, and in the instruments employed in carrying it on. Tillage farms generally small. Oats and potatoes principal crops, but wheat is now rather extensively cultivated. A good deal of work is done by the *loy*, a species of spade. Cattle, long-horned; sheep, long-woolled; both breeds good; few dairies. Some new cottages, on a few estates, are neat and comfortable, but the great majority continue to be as bad as possible. The same may be said of the farm buildings. There are veins of coal and ironstone in the N. parts of the co., to the W. of Lough Allen. These had been occasionally wrought to some extent for a considerable period, but in general to the heavy loss of those by whom the works were carried on. It was, however, contended that this happened from the want of capital, or want of skill on the part of those employed, and the most exaggerated and delusive accounts were, at the same time, published of the value of the mines. At length, during the year 1823, three companies were formed for working the coal and iron mines at Arigna and other places in this co. One of these, after examining the ground, prudently declined proceeding any farther; the energies of another were paralysed by the fraud, jobbing, and mismanagement of some of its directors and agents; and the third (the Irish Mining Company), an enterprising and well-conducted association, ultimately abandoned the undertaking, their collieries having proved, if not absolutely worthless, not worth the cost of working them. The linen manufacture was at one time pretty extensively diffused over the co., but it has latterly very much fallen off. Being washed throughout its whole extent by the Shannon, few Irish cos. have greater facilities than Roscommon for the easy and convenient disposal of their products. It is divided into 6 baronies and 56 parishes, and sends 2 members to the House of Commons, both for the co. Registered electors. 3,650 in 1865. Principal towns, Roscommon and Elphin. At the census of 1861, the county had 28,215 inhab. houses, 29,776 families, and 157,272 inhabitants; while in 1841 the county had 44,087 inhabited houses, 46,387 families, and 253,591 inhabitants.

Roscommon, an inland town of Ireland, prov. Connaught, cap. of the above co., 6 m. W. from Lough Ree, and 78 m. W. by N. Dublin, on the Midland Great Western railway. Pop. 2,699 in 1861. The town has a par. church, a Rom. Catholic chapel, a public school, a market house, a cavalry barrack, an extensive modern co. court house and gaol, and an infirmary. Races are annually held in the vicinity. Under a charter of James I., in 1612, the corporation, which consisted of a sovereign, 12 burgesses, and a commonalty, returned 2 mems. to the Irish H. of C. till the Union, when it was disfranchised. It principally occupies the S. slope of a gently rising hill; but it is straggling, ill-built, and poor, its hovels stretching along the principal lines of road by which it is approached. Latterly, however, it has been somewhat improved. In summer, it suffers from a deficiency of water. A manor court holds pleas for debts to the amount of 10*l*. The co. assizes are held here; as are general sessions twice a year, and petty sessions every Monday. It is a constabulary station, and has manufactures of coarse woollens, linens, and brown pottery, for the supply of the

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immediate neighbourhood. The trade in corn is increasing. Markets on Saturdays; fairs on Whit-Monday and 5th December.

The ruins of an old Dominican abbey, founded in 1257, have a fine monument of its founder, one of the O'Connor family. Here, also, are the remains of a fine old castle, built by the English soon after their entry into this part of the co. The town, and a considerable contiguous estate, which has hitherto been much neglected, are the property of the Earl of Essex.

ROSCREA, a town of Ireland, prov. Munster, near the NW. extremity of the co. Tipperary, finely situated between the Sliebh-Bloom and Devils-bit ranges of hills, on a branch of the lesser Brosna, 40 m. NE. Limerick. Pop. 3,543 in 1861. The town is of great antiquity, having been made the seat of a bishopric in the 6th century, united to Killaloe in the 12th. Some remains of the old cathedral may still be seen in the W. front of the par. church; it has also a fine stone cross, a pillar tower, an old castle built by the Ormonde family, and the ruins of a Franciscan monastery. The town is irregularly built. Among the public buildings are the par. church, a Rom. Catholic chapel, meeting-houses for Quakers and Methodists, a school on the foundation of Erasmus Smith, a fever hospital, cholera hospital, and dispensary, market-house, bridewell, and barrack. A manor court, which holds pleas, to the extent of 10*l*. Irish, sits monthly; petty sessions are held on Mondays. It is a constabulary station. It manufactures coarse woollens, has several flour mills, two tanyards, two breweries and a distillery, and carries on a very extensive trade in grain; its retail trade is also considerable, the surrounding country having a more than usual number of resident gentry. Markets on Mondays and Thursdays; fairs on 25th March, 7th May, 21st June, 8th August, 9th October, and 29th November.

ROSETTA, or ROSSETTA (Arab. *Rashid*), a town and sea-port of Lower Egypt, on the W. branch of the Nile (the anc. *Bolbitine* mouth), near its embouchure, 36 m. ENE. Alexandria. Down to a late period, it was one of the most important commercial towns in the country, and had a pop. estimated to amount to about 25,000; but since the opening of the Mahmoudieh canal from Alexandria to the Nile, Rosetta has sunk into comparative insignificance; its pop. has dwindled down to about 4,000, and the principal traffic consists in the removal to Alexandria of the bricks, and other materials, of its buildings. It was principally constructed of red brick, plastered over and white-washed. As elsewhere in the East, the streets are narrow, and the upper stories project, so as frequently to meet. Upon the whole, however, Rosetta is neater than many oriental towns, and its situation in the midst of date, banana, and orange groves, is distinguished for beauty. The inhabs. are principally occupied in the rice, cotton, sail-cloth, and leather factories established by the Pacha, at a wretchedly low rate of wages. There are now no resident merchants in Rosetta, and its shipping, which was formerly considerable, is reduced to a few boats. The port, though tolerably secure within, is difficult of entrance, there being a shifting bar at the mouth of the river, which can only be passed with safety during favourable winds, and at certain times of tide.

Rosetta is famed for the supposed salubrity of its air, which attracts visitors thither during the summer and autumn months. It was founded by one of the caliphs about 870, near the site of the anc. *Bolbitinum*, but has no antiquities of its own. Here was discovered the famous *trilingual* tablet, called the 'Rosetta stone,' to which we are

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mainly indebted for the discoveries of Young and Champollion.

ROSS and CROMARTY, two cos. of Scotland, in the Highlands, forming together a maritime district of great extent, stretching quite across the island, and including Lewis, in the Hebrides. These cos., though in some respects distinct, are united under one sheriff, and Cromarty being a small co., consisting of several detached portions, most of which are wholly surrounded by parts of Ross, they may be most conveniently noticed under one head. They are bounded N. by the co. of Sutherland, E. by the Friths of Dornoch and Moray, S. by Inverness, and W. by the Atlantic. Area, 1,904,000 acres, of which 1,532,800 are mainland, and 375,200 islands; the freshwater lakes cover a space of 44,800 acres on the mainland, and of 12,800 in the islands. The E. parts of the prov., consisting of the districts called the Black Isle, or the Peninsula, between the Beauly and Moray Friths, the Frith of Cromarty; and Easter Ross, or the Peninsula, between the Friths of Cromarty and Dornoch, are comparatively flat and fertile. Easter Ross has a considerable extent of clayey loam, and of light sandy soil. The soil of the Black Isle is very various; much of it is poor, but the cultivated portion consists principally of clayey loam, good black mould, and sandy loam. In Strathpeffer, and the country round Dingwall, the soil is clayey; but with these exceptions the rest of the co. is wild, dreary, rugged, and mountainous, interspersed with lakes, and narrow glens, that afford pasture for sheep and black cattle. Estates, for the most part, very large; but there are several that are not of much value. Farms of all sizes; but the number of small occupancies, though still very considerable, is much diminished. Native breed of cattle hardy, compact, and well suited to the country; but in the W. parts of the co., the Skye and Argyleshire breeds, or one closely allied to them, are most prevalent. Cattle were formerly much more abundant than at present. Sheep-farming has, for many years past, engrossed almost the whole attention of the principal farmers and improvers; so that, besides a decrease in the number, it is also said that the breed of cattle has deteriorated. This, however, has been denied by others: and, at all events, the baneful practice of overstocking is no longer carried to any thing like the extent to which it was formerly practised in this, as well as in other Highland cos. At no very distant period, oxen were extensively employed in field-labour; but they are no longer used for this purpose. All sorts of improvements, both in breeding and cropping, have been tried by the principal proprietors, and by many intelligent and enterprising sheep farmers that have immigrated thither from the S. Most part of Easter Ross, great part of the Black Isle, with the country round Dingwall, and along the NW. shore of the Inner Frith of Cromarty, now ranks with the finest districts of Scotland. It is traversed in every direction by excellent roads, is well fenced, and has a more than usual number of seats and plantations. Agriculture has been wonderfully improved; and the crops of wheat and turnips are at present nowise inferior to those in the more S. cos. But exclusive of these districts, a great extent of mountainous country is still occupied by the old Highland tenantry. These are a brave and hardy race; but poor, and without either enterprise or industry. They occupy the straths or valleys between the mountains, and along the banks of the rivers, which in some places are so thickly tenanted, that there is a family for every Scotch acre of arable land. On this they raise oats, bear, or bigg (a species of barley), and potatoes; frequently culti-

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vating the ground with a crooked spade (caschrom) instead of a plough. The mode of ploughing, which was formerly general over the whole country, and which is still practised by the smaller tenants, is barbarous in the extreme. The smaller tenants uniformly possess a considerable extent of grazing ground, which is commonly contiguous to, but sometimes at a considerable distance from, their arable possession. Their huts are for the most part wretched; few of them have either chimneys or windows; they prefer, indeed, living in the midst of smoke and filth; and in winter, the cattle are generally housed under the same roof with the family. Except for a few months, when sowing or reaping their crops, preparing and saving their fuel, the greater part of their time is spent in the pursuit of game, in fishing, or in idleness.

The co. of Ross, at the census of 1861, had a pop. of 81,406, living in 15,728 inhab. houses. Cromarty, in 1861, had a pop. of 81,406, in 15,728 houses. Registered electors, at the general election of 1865, for Ross, 885; and for Cromarty, 48. The old valued rent was 6,608*l.* for Ross, and 1,074*l.* for Cromarty; and the new valuation, for 1864-65, was 198,068*l.* for Ross, and 8,178*l.* for Cromarty.

ROSS, a town and par. of England, co. Hereford, hund. Graytree, on the Wye, 15 m. W. by S. Gloucester. Area of par. 8,540 acres. Pop. of par. 4,346 in 1861. The town is finely situated on an eminence above the river, but its streets are steep, rough, and narrow. The church, in a conspicuous situation, has a lofty spire, and is partly in the perpendicular style, but it has been injured by alterations and repairs. The living, a rectory and vicarage, vested in the patronage of the bishop of Hereford, is one of the best in the co., being worth 1,284*l.* a year, nett income. There is a market-house, two charity schools, and an almshouse. In Camden's time Ross was celebrated for its cutlery and its cyder; the former, however, has entirely disappeared, but it continues to be distinguished by the excellence of the cyder made in its vicinity. It is governed by a serjeant and four constables. Market on Thursday.

The 'Man of Ross,' immortalised by Pope (*Moral Essays*, iii. lin. 250), was a Mr. John Kyrle, a native of the town, where he died in 1724, at the age of 84. The splendid eulogium of the poet did not really go beyond Kyrle's merits. He expended his time and income in promoting objects of public utility and benevolence, by which the town continues to be benefited. His portrait is still preserved in his house, now an inn, near the entrance of the road from Gloucester.

ROSLIN, an inconsiderable village of Scotland, co. Mid-Lothian, near the N. Esk, 7 m. S. by E. Edinburgh. It is remarkable only for the ruins of its castle and chapel, and for the fine scenery along the river. The ruins of the castle, the extent and magnitude of which sufficiently evince its former strength and importance, stand on a peninsulated rock, accessible only by a lofty bridge. The era of its foundation is uncertain. It was for a lengthened period the residence of the St. Clairs, earls of Orkney and Caithness, some of whom lived here in almost regal splendour. It was taken and burnt by the English, under the Earl of Hertford, in 1544. The chapel of Roslin, at some little distance from the castle, is the most exquisite specimen of the florid Gothic in Scotland, and is in good preservation, having escaped, with comparatively little injury, the iconoclastic ravages of the Reformers. It was founded in 1445. The inside is 69 ft. in length, 34 in breadth, and 40 in height, supported by two rows of clustered pillars, about 8 ft. in height,

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with an aisle on each side. The arches are Saxo-Gothic, and are extended across the side aisles; but the centre of the church is one continued arch, divided into compartments, and finely sculptured. The capitals of the pillars are enriched with foliage, and a variety of figures, most elaborately and minutely cut.

The Earls of Orkney and Roslin were interred in a vault below the floor of the chapel; and it is a curious fact, that down almost to the æra of the revolution they were buried, not in coffins, but in complete suits of armour. This circumstance has been alluded to by Scott, in his fine ballad of 'Rosabelle,' in the 'Lay of the Last Minstrel.'

The glen in which the Esk runs from Roslin to Laswade is mostly narrow; has in parts high, precipitous, rocky, and well-wooded banks, and is celebrated for its romantic scenery. A little below Roslin, on the opposite side of the river, is Hawthornden, the seat of Drummond, the contemporary and friend of Ben Jonson, and one of the best poets of his age. The house stands on the brink of a precipice, overhanging the river, and, with the estate, is now in the possession of the descendants of the poet. Below the house are extensive caves, or apartments cut in the sandstone rock.

ROSSBACH, a village of Prussian Saxony, 16 m. S. Halle, celebrated in modern history for its being the scene of the great victory gained on the 5th of November, 1757, by Frederick the Great, with little loss to his own forces, over the French and Imperialists.

ROSTOCK, a commercial city and sea-port of N. Germany, being the largest town, though not the cap. of the grand duchy of Mecklenburg-Schwerin, on the Warnow, 9 m. above its mouth in the Baltic, and 40 m. NE. Schwerin, with which it is connected by railway. Pop. 26,396 in 1862. The town is surrounded with old walls and divided into three parts, the old, middle, and new town. It has several suburbs, which, with the city, are built in an old-fashioned style. It has a ducal palace, numerous churches, a convent, two hospitals, a town-hall, and theatre. The church of St. Mary's is interesting from its having a monument in honour of Grotius, the illustrious author of the treatise 'De Jure Belli et Pacis,' one of the greatest men of modern times, who expired here on the 28th of August, 1645, far from his family and friends, an exile from his country. In one of the squares, thence called *Blucher's Platz*, is a statue of the celebrated Prussian general, Blucher, who was a native of the town. The university of Rostock, one of the oldest in Germany, was founded in 1419. It has 4 professors of theology, 5 of jurisprudence, 5 of medicine, and 10 of philosophy; besides 3 extraordinary professors, and 10 private teachers, having attached to it a library of 45,000 printed volumes, theological and other auxiliary schools, an anatomical theatre, laboratory, botanic garden, and various scientific collections. It is, however, but poorly attended, having on an average less than 100 pupils. Rostock has a society of natural history, and other learned associations, and a commercial institute. It is one of the most active manufacturing towns in N. Germany, having numerous woollen factories, breweries and distilleries, vinegar and soap-works. Rostock has a pretty extensive trade. The exports consist chiefly of good red wheat, barley, pease, rapeseed, and a few oats; with wool, rags of a very superior quality, oil cake, rape oil, bones, flax, horses, cattle, and provisions. The average export of all kinds of grain may be taken at from about 115,000 to 130,000 qrs. a year, and the total value of all sorts of

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exports may be estimated at about 280,000*l*. The imports consist of colonial products, spices, wines, and manufactured goods. There belong to the port nearly 200 vessels of from 150 to 250 tons, which trade with most European nations, the U. States, and Brazil. The outport of Rostock is Warnemunde, at the mouth of the Warnow. There is a good pier, the depth of water at which is from 12 ft. to 14 ft. The depth of water in the river from Warnemunde up to Rostock is usually from 8 ft. to 9 ft., so that vessels drawing more than this must be lightened to get up the latter. The commercial weights here are the same as at Hamburg.

Rostock having been formerly one of the Hanse Towns, had, for a lengthened period, and till lately, some exclusive privileges. Its vessels bore the flag, not of the grand duchy, but of the city of Rostock; and it had its own separate jurisdiction, independent of the rest of Mecklenburg; appeals from its tribunals being carried to the central court at Lubeck. But it has now only a court of secondary jurisdiction, with appeal to the tribunal at Parchim; and its other privileges have been either curtailed or abolished.

ROSTOFF, a town of European Russia, on the Don, about 22 miles above where it falls into the Sea of Azoff. Pop. 9,598 in 1858. This and the contiguous town of Nakhitchevan are the principal *entrepôts* of the trade of the vast countries traversed by the Don. The inhabs. of the latter are the more commercial, but Rostoff would seem to enjoy the special favour of the government, the depôts of provisions for the army, the fortresses of the Caucasus, and of the eastern coast of the Black Sea, being established in it. The fort St. Dimitri, near the town, is a depôt for the munitions of war required by the above-mentioned places. During the proper season there is a great deal of bustle and activity both here and at Nakhitchevan.

ROTHENBURG, a town of Bavaria, circ. Middle Franconia, cap. distr., near the Tauber, 40 m. W. Nuremberg. Pop. 5,949 in 1861. The town is beautifully situated, but irregularly laid out, and has few edifices worth notice. It was anciently a free city of the empire, and is surrounded by old walls flanked with numerous towers. It has manufactures of woollen stuffs, and an active trade in corn and cattle.

ROTHERHAM, a manufacturing town, par., and township of England, W. riding co. York, liberty of Hallamshire, wap. Strafforth and Tickhill, on the Don, crossed here by a handsome stone bridge, and close to its junction with the Rother, 6 m. ENE. Sheffield, and 142 m. NNE. London. Area of par. (comprising eight townships), 12,810; do. of township, 2,140 acres. Pop. of town, 7,598 in 1861. The town, partly in a valley, and partly on the sides of two steep hills, has several steep, narrow, and irregular streets, lined with indifferently-built stone houses. Recently, however, great improvements have been made, the streets having been widened, new houses built, and gas generally introduced. The court-house, gaol, market-house, and public library, are handsome modern buildings. The church (chiefly built by Archbishop Rotherham, in the 15th century, and by him rendered collegiate) is a large cruciform structure of perpendicular architecture, with a central tower and spire fully enriched with panels, canopies, and crockets: 'On the whole,' says Mr. Britton, 'this is one of the finest par. churches in the N. of England, and deserves the most attentive examination, both as to its composition and most of its details.' (Arch., p. 274.) The living, a vicarage in the gift of Lord Howard of

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Effingham, is worth 170*l.* a year. There is an episcopal chapel in the township of Thisiey; handsome churches have also been erected at Greaseborough, Thorpe, and at Kimberworth. The town has a Rom. Cath. chapel, and places of worship for Wesleyan and Primitive Methodists, Baptists, and Unitarians; besides which, there is at Marsborough, on the other side of the river, an Independent chapel, with an attached academy for the education of young men intended for the ministry belonging to that class of dissenters. There are seven Sunday schools, a Lancasterian school for 400 children of both sexes, two endowed charity schools, and a grammar school, founded in 1584, slenderly endowed, but conferring certain advantages on its pupils at the English universities. A dispensary was established in 1806; and there are almshouses for poor unmarried females. An ecclesiastical college, founded here at the close of the 15th century, was suppressed by Edward VI.; a part of the building is now used as an inn.

Rotherham, from its position in the middle of a district abounding with iron and coal, has long been distinguished for its manufactures of cast-iron; and for some time during the American and French wars it almost exclusively supplied the navy with cannon. The iron-work for Sunderland, Southwark, and other bridges, was also cast here. The manufacture is still carried on with great vigour, new establishments have sprung up, and at present fenders, engine-work, and every variety of hardware, are manufactured on an extensive scale. Glass, starch, naphtha, and soap are also produced, and there are extensive porter breweries. The town enjoys great facilities for the transport of its manufactured produce. The Don was made navigable to Tinsley, above the town, in 1720, and is accessible to Rotherham for vessels of 50 tons. A railway to Sheffield was opened in 1838, and the North Midland railway passes close to the town. The distance by railway to London is 171 m. Large markets for corn and cattle on Monday; fairs, Whit-Monday and Dec. 11. The town has no regularly constituted municipal authority; but a body chosen by the inhabitants, called 'the feoffees of the common land of Rotherham,' employ the proceeds of certain rents for the improvement of the town. The midsummer quarter sessions for the W. riding, and weekly petty sessions, are held here by the co. magistrates, and it has a county-court. It is, also, the chief place of a poor-law union.

ROTHESAY, a royal bor. and sea-port of Scotland, co. Bute, of which it is the cap., at the head of a beautiful bay on the E. side of the island, 30 m. W. by S. Glasgow. Pop. 7,122 in 1861. Port Bannatyne, a favourite sea-bathing residence, is 2½ m. NW. Rothessay. Being protected on the land side by surrounding hills, and towards the sea by the opposite coast of Argyll, only 3 m. distant, Rothessay has a very mild climate, and is much resorted to by sea-bathers, as well as by invalids. Exclusive of its castle, the principal public buildings are the town-hall and county building, in the castellated form, with an elegant tower; two places of worship connected with the established, and two with the free church; and chapels belonging to the Associate Synod, Independents, and Episcopalians. The parish church is situated ½ m., and Mount Stuart, the seat of the Marquis of Bute, 3½ m. S. from the town. The means of education are ample. Here, also, is a subscription library, with two reading-rooms, various friendly societies and charitable associations, three branch banks, and a savings' bank. The cotton manufacture has been introduced;

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and the cotton mills employ above 400 hands. But the fisheries may be said to be the most important, as well as the oldest, branch of business carried on. The salmon fishery obtains to a limited extent, as also that of haddocks, whittings, and soles. But the herring fishery is more extensive than all these together. The fishery, however, is not carried on in the Bay of Rothessay; or if so, only in a small degree; it centres chiefly in the kyles (straits) of Bute, and the adjacent salt-water lakes; but it is principally carried on with Rothessay capital. About 60 vessels, of 3,000 tons, exclusive of steamers, belong to the port. There are two small building-yards.

The castle of Rothessay, a noble ruin, is of great antiquity. It was at one time a favourite royal residence, and Robert III. expired in it in 1405. John, Earl of Bute, the favourite of George III., and Matthew Stewart, the mathematician, father of Dugald Stewart, were both natives of this bor. Previously to 1832, it joined with other bors. in sending one mem. to the H. of C.; but it is now merged in the co. representation.

ROTTERDAM, a celebrated commercial city of the Netherlands, being, in point of pop. and importance, the second in the kingdom, prov. S. Holland, cap. arrond., on the N. bank of the Maas, where it is joined by the Rotte, whence its name, 17 m. (direct distance) from its mouth, and 35 m. SSW. Amsterdam, with which it is connected by railway. Pop. 112,728 in 1868. The shape of the city is triangular, the base of the triangle extending along the river. It is surrounded by a moat, and, like every other Dutch town, is intersected by numerous canals, only one public thoroughfare, the High Street, being without a canal in its centre. The street, which runs in a direct line E. and W. through the city, is somewhat raised above the rest, being built upon the dam by which the Maas is prevented from inundating the country behind the town. Being the principal seat of retail commerce, it is lined with shops throughout. Rotterdam has a striking appearance from the river.

The fine quay, called the *Boompjes*, from the rows of trees with which it is planted, extends along the river for nearly a mile: behind the trees is a line of well-built houses, four or five stories in height, mostly of dark-coloured brick, and having an aspect of much grandeur. The quay being crowded with shipping, this part of the city is the great seat of business, and presents a scene of incessant activity. 'In penetrating through the town from the Boompjes,' says a recent traveller, 'we come to street after street, each having a canal in the middle, lined with trees on both sides, and exhibiting a mixture of lofty gable fronts of houses, trees, and masts of shipping. The canals, or havens, stretch lengthwise and crosswise, like the meshes of a net, through the city; and at every short interval is perceived a drawbridge of white painted wood, constructed with ponderous balancing beams overhead, and raised by means of chains for the passage of vessels. The ground beneath the trees is paved with small yellow bricks, and is chiefly occupied as quays for the landing of goods. The space from the trees to near the houses is paved in the usual coarse manner for carts and carriages, and here the foot passengers are generally obliged to walk, for small outshot buildings, flights of steps to doorways, and such like interruptions prevent any regular thoroughfare on the narrow brick trottoirs close by the houses. The havens are in a few places protected by chains from the streets, so that there is a constant liability to accidents, particularly at night, when the darkness is but poorly relieved by oil lamps dangling,

Parisian fashion, from the ropes stretched betwixt the trees and the houses. Latterly a portion of Rotterdam has been lighted with gas; but, according to a parsimonious plan, the lamps are not lighted when the moon is expected to shine.'

The houses of Rotterdam are generally on a large scale, and lofty; in many of the streets they are really elegant. The writer just quoted speaks as follows of a large class of residences. 'Each house may be considered the castle of a merchant, who both resides with his family, and carries on the whole of his commercial transactions within the same set of premises. The front part of the building exhibits an elegant door of lofty proportions, 15 or 20 ft. high for instance, at the head of a flight of steps. On getting a glimpse into the interior you see a lobby paved with pure white marble, and a stair of the same material leading to the story above, which consists of a suite of lofty rooms, and is the main place of residence of the family. Some of the rooms are finished in a style of great elegance, with rich figured cornices and roofs, silk draperies to the windows, smooth oak floors, and the walls most likely painted as an entire picture or landscape, in oil, by an artist of eminence. Near to the door of the house is a coach-house door, which, on being thrown open from the street, discloses a wide paved thoroughfare leading to an inner court, the buildings round which are devoted to the whole warehousing department of the merchant. The bulk of the edifices of this great trading city are of the kind I describe.' The ordinary houses are badly heated, and are in other respects not very comfortable; but the poorest house in the city is as clean as scrubbing and washing can make it, both inside and out; in this respect, indeed, the Dutch have no equals. Among the minor peculiarities which strike an Englishman, are the small mirrors affixed outside to almost all the first-floor windows, which are placed so as to show the inmates whatever may be going on in the street below. The want of good potable water is a great inconvenience.

Rotterdam has few public buildings of interest. The town-hall, a large modern structure in the Grecian style, has a noble council room, with rooms for the city library and philosophical apparatus; but, though superior to the generality of such edifices, it is much inferior to that of Amsterdam. The exchange, on the contrary, is a finer building than that of the capital; it is rectangular, with a court in the centre, surrounded with arcades, supported by 80 pillars, each of a single block. The Schieland palace, occupied in 1811 by Napoleon and Maria Louisa, is perhaps the finest of the public edifices. The custom-house and the former East India house on the Boompjes present nothing remarkable. There are from 20 to 25 churches, including one for the English Episcopalians, and one for the Scotch Presbyterians. The principal is the church of St. Lawrence, formerly the R. Catholic cathedral. It is a large Gothic brick building, with a lofty square tower, and dates as far back as 1412; but nearly all its ancient ornaments were swept away at the Reformation. In it are the monuments of the celebrated Dutch admirals, De Witt, Kortnaer, and Brakel, each of which has an appropriate inscription. It has also a splendid organ, said to be superior in size to the great organ of Haarlem, generally considered the largest in Europe. This is 150 ft. in height, mounted upon a colonnade about 50 ft. in elevation, and has 5,500 pipes, the largest being 32 ft. in height, and 16 in. in diameter. In the market-place is a bronze statue of Erasmus, the most illustrious of the natives of Rotterdam. The house where this great scholar,

'the glory of the priesthood and the shame,' first saw the light, on the 28th Oct. 1467, still exists; but (*quantum mutatus!*) it has been degraded into a gin-shop. Rotterdam has a naval dockyard; but it is on a small scale, and contains little worth notice. In the neighbourhood of the city are many places of entertainment, as tea gardens, and in the town are several clubs.

Rotterdam is the seat of the marine department for the Maas, of the superior judicial courts for the prov., and of a tribunal of commerce; the cap. of the 9th militia district of the kingdom; and the residence of a military commandant, a director of police, and numerous foreign consuls. It has a society of arts and experimental philosophy, founded in 1767, branches of the Societies of Public Good and the Fine Arts, a college, a Latin school; many superior intermediate and poor schools, in the whole of which, according to Chambers, about 8,000 children are instructed; and various private academies. The central prison of Holland for juvenile offenders is at Rotterdam; it has also various workhouses and charitable institutions, and a savings' bank, paying interest at 4 per cent. There are manufactories of tobacco, refined sugar, needles and pins, glass wares, corks, dyeing and chemical products, and spirits; large markets are also held weekly for corn, flax, hemp, and other agricultural produce; and the annual fair of Rotterdam is the largest in Holland. Rotterdam is more advantageously situated in a commercial point of view than Amsterdam, or any other Dutch town. She is easily accessible from sea by the largest class of merchantmen; and from her position on the principal embouchure of the Rhine, as well as of the Maese, she is the grand emporium of the foreign trade of the countries which they traverse. The imports and exports are similar to those of Amsterdam (which see). The white Zealand and Rhenish wheat shipped here is of a superior quality; and it is the best market for madder, geneva, cheese, and butter. The tonnage of the vessels entering the port amounted to 666,431 in 1860; to 697,048 in 1861; and to 710,775 in 1862. Rotterdam has a regular intercourse by means of steam-packets with London and other great over-sea ports, and with Dusseldorf, Cologne, Maestricht, and other ports on the Rhine and Maese.

Besides Erasmus, the great painter Adrian Vander-Werf was a native of Rotterdam.

ROUBAIX, a manufacturing town of France, dép. du Nord, arrond. Lille, cap. canton, on the canal of Roubaix, 7 m. NE. Lille, on the railway from Lille to Courtray. Pop. 49,274 in 1861. Roubaix, like most Flemish towns, is well built. It formerly laboured under a want of water; but of late an adequate supply has been obtained by means of artesian wells. After Lille, Roubaix is one of the chief towns in the dép. for the manufacture of cotton goods; it has been estimated that, in the town, and immediately adjacent country, about 30,000 hands are alternately employed in the manufacture of cotton and woollen goods; the latter from about June to September, and the former during the remainder of the year. The articles chiefly manufactured are Thibets, waistcoat-pieces, and thick cotton goods. There are about 12,000 looms in the district, of which half are Jacquard looms. The latter are principally in the factories, the manufacturers finding it necessary to preserve the privacy of their patterns. A weaver will, on the cotton goods, earn at an average 30 sous (15*d.* a day); on the second class work, from 30 to 40 sous (15*d.* to 20*d.*); and on the Jacquard loom, from 2 fr. to 5 fr. per day, the average being about 3 fr. The working pop. of

Roubaix is increasing by continual immigrations from Belgium. Some of the labourers live in the town; but the greater number reside in the neighbouring villages and hamlets, coming daily to and from the factories, in which they work from 14 to 15 hours a day. They live mostly on meat, soup, potatoes, and beer; using butcher's meat 4 days a week. The work-people of Roubaix and Turcoing are, whether as regards morals, cleanliness, clothing, lodging, food, or health, decidedly superior to those of Lille. Drunkenness is here, and, indeed, every where else throughout French Flanders, a prevalent vice; but, in other respects, the conduct of the work-people seems to be good; and they have established numerous societies for their mutual support and assistance.

ROUEN (an. *Rothomagus*), one of the principal cities of France, and the great seat of its cotton manufacture, dep. Seine-Inférieure, of which it is the cap., on the Seine, 44 m. (direct distance) from its mouth, and 67 m. NW. Paris, on the railway from Paris to Havre. Pop. 102,649 in 1861. The city, which stands in a fine and fruitful country, is admirably situated on a navigable river, by which it communicates with the cap. on the one hand, and with the flourishing sea-port of Havre on the other; and it is surrounded by a verdant and delightful country. Its numerous spires and towers, and the vessels that throng its quays, give it a very imposing external appearance, to which its interior presents in most parts a striking contrast. Generally it is ill-built. Streets mostly narrow and crooked; houses principally of wood, or rather of lath and plaster, though in the W. and newer quarters of the city some are built of more solid materials, and have even considerable elegance. The city is oval, or rather lozenge-shaped, and was for a lengthened period strongly fortified; but its ramparts are now demolished, and their place is occupied by a series of boulevards, which separate the city proper from the *faubourgs* Cauchois, Bonvreuil, Beauvoisine, and Martinville.

The Seine, here crossed by several bridges, divides Rouen from its large suburb of St. Sever. The boulevards, which are planted with trees, like those of Paris, and the fine broad quays and *cours*, which extend along the banks of the river, are the favourite and almost the only public promenades; the squares or open spaces are shabby and irregular, and except the Place Impériale, near the centre of the city, are all of insignificant size. Some, however, are ornamented with public fountains, with which Rouen is well furnished: the Fontaine de Lisieux is a curious piece of antique sculpture, representing Mount Parnassus, with figures of Apollo and Pegasus. In the square of La Pucelle, an indifferent statue of Joan of Arc is erected on the spot where that heroine suffered martyrdom in 1431. The central parts of the city are the chief seat of general commerce; the upper classes principally reside in the faub. Cauchois, and the N. suburbs; while the lower quarters at the E. end of the town, and the faub. St. Sever, are almost wholly inhabited by the manufacturing classes.

By far the most celebrated and striking public edifice is the cathedral, one of the noblest religious structures in France. It was constructed principally between the 13th and 16th centuries inclusive: entire length 434 ft.; breadth 103 ft.; length of transepts, 174 ft.; height of nave 89½ ft. Its richly ornamented front has three fine portals, over the central of which is a square tower, and spire of iron work, reaching to a height of 464½ ft.; flanked by two lofty but dissimilar towers, the Tours Remain and Georges d'Amboise. The

former, which dates from a period long anterior to the rest of the building, is in a simple and unadorned style; but the latter, built at the end of the 15th century, is much admired for the beauty of its architecture. It is ornamented with numerous sculptures; and before the Revolution contained an enormous bell, which, with many others belonging to this cathedral, was then sent to the cannon foundry. The interior of the edifice is lighted by 130 windows, many of which are ornamented with stained glass; and contains a vast number of tombs, including that of Richard I. (Cœur de Lion) of England, many dukes of Normandy, and 17 archbishops of Rouen; and the fine mausoleum of the two cardinals d'Amboise. The latter is very perfect; but many of the other monuments were much mutilated in the religious and revolutionary wars. The church of St. Ouen in the Place Royale belonged to the oldest conventual establishment in Normandy, and occupies a larger extent of ground than the cathedral. It is an admirable specimen of the pointed Gothic: its fine octagonal tower rising from the centre of the building, is 255 ft. in height. The town hall adjoining this church was originally a portion of the conventual edifice; and, besides various public offices, is appropriated to the museum and public library, with about 80,000 volumes. Several of the other churches in Rouen well deserve notice, and some are of high antiquity. The great city clock is placed in a square Gothic tower, erected in 1839, in the High Street. The Palais de Justice, with a noble saloon, was built for the parl. of Normandy, at the end of the 15th century. The mercantile halls of Rouen, for the exhibition and sale of different articles, are well adapted to their destination. They occupy three sides of a square, the centre of which forms an open exchange. A special apartment is devoted to every different kind of goods; the cotton-cloth hall, where the most important branch of traffic is conducted, is 290 ft. in length, by 58 ft. 4 in. in breadth. Every Friday, from 6 A.M. till noon, these halls display great commercial activity. There is another exchange adjacent to the quay. The exchequer office, *chambre des comptes*, barracks, the *bicêtre*, a spacious general prison, another prison for accused but untried persons, prefecture, archbishop's palace, mint, custom-house, college, 2 theatres, *hôtel-dieu*, the general infirmary, which, according to Hugo, has commonly 2,000 inmates, Protestant church, and the remains of an old fortress, are among the other principal public buildings. Rouen has some private houses worth notice, especially those in which Fontenelle and Pierre Corneille were born; and others in which are some curious works of art. It is the seat of a royal court for the depts. Seine-Inf. and Eure; of tribunals of primary jurisdiction and commerce; a chamber of commerce, and council *des prud'hommes*, royal and university academies, an Imperial college, and a mint established in the 9th century; the cap. of the 15th military division of France; the seat of an archbishop, whose diocese comprises the dep. Seine-Inférieure, and whose suffragans are the bishops of Bayeux, Constances, Evreux, and Seez; the seat of a Protestant consistory; and the residence of many foreign consuls. It has a central society of agriculture; societies of public emulation, commerce, agriculture, and medicine; a Bible society; schools of design and navigation; a botanic garden; savings banks, and various charitable institutions.

Rouen is so eminent for its cotton manufactures that it has acquired the title of the French Manchester, and checked printed cotton cloths for

women's dresses are commonly known in France by the name of *rouenneries*. It was anciently celebrated for its linen fabrics, the manufacture and dyeing of which appear to have been carried on in it in the earliest times of the French monarchy. But so late as the middle of the last century, the workmen employed at Rouen were nearly all foreigners, chiefly Germans, Dutch, or Swiss; who remained in France only during a part of the year, returning to spend the remaining months in their native countries: and 50 years ago the cotton yarn employed in the manufactures was wholly spun by hand. At present, however, both water and steam power are largely employed. The whole region round Rouen shares more or less in its branches of manufacture. It is estimated that the weavers of cotton and woollen goods in the dep. amount to 130,000, 4-5ths of whom are resident in Rouen and its immediate neighbourhood. According to official returns, there are 50,000 persons, men, women, and children, or about half the entire pop. of the city and suburbs, engaged in the cotton manufacture.

The manufacturers of Rouen (says Mr. Symons) pride themselves greatly on the superiority of their products. The goods produced by the Norman looms are in direct competition in third markets with those from the W. of Scotland. The wages of Norman weavers are, if anything, lower than in Scotland, but provisions are at least 20 per cent. cheaper. The net wages obtained by country weavers working on their own account, are about 1 fr. a day, or 5s. a week, and this may be taken as above, rather than below the average. Children and women are both occupied in weaving at proportionate earnings. The working classes of Rouen are, upon the whole, in a much less depressed condition than those of Lisle, and their health is also much better. Drunkenness is in both towns the prevailing vice among the lower classes; but it seems to be less prevalent at Rouen. The woollen manufactures of the city are unimportant; their chief seat in this dep. being at Elbeuf (which see). Broad silks, velvets, hardware, superior earthenware, chemical products, and confectionary, for which Rouen is famous, are the other principal products. Vessels of 200 tons ascend to the city, which carries on a considerable trade with the countries both in the N. and S. of Europe, the Levant, America, and the other maritime depts. of France; the greater part, however, of its foreign commerce is carried on through the intervention of Havre.

Rouen was of sufficient importance in the third century to be created a bishop's see; it afterwards became successively the cap. of the kingdom of Neustria, and of the duchy of Normandy. Prince Arthur of Brittany having been put to death in Rouen, in 1203, by John king of England, Philip Augustus besieged and took the city in the year following. It was retaken by Henry V. of England in 1417, and retained by the English till 1449, when it was finally annexed to the French crown. The Reformation made great progress here; and the city suffered much in consequence of religious feuds. But fewer individuals fell victims to the Massacre of St. Bartholomew and the phrenzy of the Revolution in this than in most other large French cities. Rouen has given birth to some of the most illustrious individuals of whom France has to boast; amongst whom may be specified Pierre Corneille, one of the greatest modern dramatists, born here on the 6th of June, 1606; his brother, Thomas Corneille; Fontenelle, the academician, born here in 1657; Bochart, the famous oriental scholar; Daniel the historian; and Brumoy, author of the 'Théâtre des Grecs.'

ROVEREDO (Germ. *Rovereit*); a town of the Tyrol, on the frontiers of Austrian Italy, cap. circ. of its own name, on the Leno, near its junction with the Adige, ■ m. S. by W. Trent, on the railway from Trent to Verona. Pop. 8,108 in 1857. The city is well built, many of its edifices being of marble. The most remarkable building is the castle, on a height commanding the town. It has superior civil, criminal, and commercial tribunals for the circ., a gymnasium, and high school, and an English conventual establishment. In and round the town are numerous silk mills. It has also tobacco and leather factories.

ROVIGNO, a sea-port town of Austrian Italy, circ. Istria, on the Adriatic, 39 m. SSW. Trieste. Pop. 9,412 in 1857. The town has numerous fine churches and other public edifices, high and female schools, and 2 hospitals. Its principal church is built after the model of St. Mark's at Venice. It is the seat of civil, criminal, and commercial tribunals; has two harbours, one of which is tolerably secure; and carries on a considerable trade in wine, olives, timber, anchovies, and tunny. Its inhabs. are principally seafaring people or engaged in the fisheries; they are, however, partly occupied in ship building and making cables. Near the town are some quarries of superior marble.

ROVIGO (an. *Rhodigium*), a town of Austrian Italy, prov. Venice, cap. deleg., on the Adigetto, a branch of the Adige, in the swampy tract of the Polesin, 36 m. SW. Venice, and 17 m. NE. Ferrara, on the railway from Venice to Ferrara. Pop. 9,543 in 1857. The town is fortified in the old style, with walls flanked with towers, a ditch, and a citadel; and is entered by 6 gates. It has numerous churches, a seminary, and a hospital; 2 orphan asylums, a large and fine theatre, an academy of sciences and arts, and various superior public schools. The library of the Count Silvestri, comprising 36,000 vols., is open to the public. It is the seat of the superior courts for the deleg., and the residence of the delegate, and the bishop of Adria. Though much decayed, it has ■ considerable trade in corn, a large fair from Oct. 20 to 28, and three weekly markets. General Savary was created by Napoleon, duke of Rovigo.

ROULERS, or ROUSSELAER, a town of Belgium, prov. W. Flanders, cap. canton, on the Mandelbecke, a tributary of the Lys, 26 m. W. by S. Ghent. Pop. 11,500 in 1860. The town has a high school, manufactures of linen fabrics, leather, soap, and oil, and some trade in butter of a superior quality.

ROXBURGH, an inland and frontier co. of Scotland, having N. the co. Berwick and a small portion of Mid-Lothian, E. and S. Northumberland and Cumberland, and W. Dumfries and Selkirk. Area, 460,938 acres, of which nearly a half is occasionally under the plough. It is partly intersected and partly bounded by the Tweed; and is traversed from its SW. border, where it has its source, NE. to Kelso, by the Teviot, whence it is sometimes called Teviotdale. It has every variety of surface and soil. The low arable lands in the valleys of the Tweed and Teviot consist principally of light turnip soil. The mountainous or pastoral district is principally in the SW. parts of the co., along the Dumfries, Cumberland, and Northumberland border. The hills, however, like the Cheviots, to which they are contiguous, are mostly smooth, dry, and well covered with good sheep pasture. Property mostly in large estates; but there are several of the smaller class of proprietors. Farms generally large; and some farmers frequently hold three or more farms. Arable husbandry is as well understood and prac-

tised in the lower parts of this co. as in the most improved parts of the empire. It is also celebrated for having been the theatre where some of the principal improvements in modern farming were first introduced, and where others were first successfully practised in Scotland. Mr. Dawson, the great improver of Scotch husbandry, occupied the farm of Frogden, near Kelso, in this co.; and in it, soon after 1760, he set to work the first plough drawn by two horses, driven by the ploughman, that was ever seen in Scotland. And if Mr. Dawson was not the first to set the example of raising turnips, he was the first practical farmer by whom they were profitably cultivated on a large scale. (Survey of Roxburgh, pp. 69. 90.) Fanners for dressing corn were also made and used in this co. before they were seen in any other part of Scotland. (Ibid. p. 59.) Large quantities of wheat are now produced. Cattle, a mixed breed. Sheep, principally Cheviots. Within the last 30 years many important improvements have been effected in this district. A large extent of land that was entirely pastoral now bears luxuriant crops; bone manure has been introduced; agricultural management has been materially amended; a good deal of waste land has been planted; farm-houses and buildings have, in numerous instances, been rebuilt on approved plans; thrashing-machines have been erected on most considerable farms; and the habits and accommodations of the people have been materially improved. There are some very productive orchards in the neighbourhood of Jedburgh, Melrose, and Kelso. Marl is found in vast quantities in several parts of the co., and it is also well supplied with limestone and freestone. Various branches of the woollen manufacture have been introduced, and are prosecuted with considerable vigour at Hawick and Wilton; and in a lesser degree at Jedburgh, Melrose, and Kelso. The par. of Kirk Yetholm, in this co., is celebrated as being the residence of the largest colony of gypsies in Scotland. Roxburgh contains 81 parishes; and returns 1 mem. to the H. of C. for the co.; and the bor. of Jedburgh joins with other burghs in returning a mem. Registered electors for the co., 1,638 in 1865. Principal towns, Jedburgh, Kelso, Hawick, and Melrose. At the census of 1861, the co. had 7,757 inhab. houses, and 54,119 inhabs., while in 1841, the co. had 8,661 inhab. houses, and 46,025 inhabs.

RUDGELEY, or RUGELEY, a market town and par. of England, co. Stafford, and E. div. of hund. Cuttlestone, on the S. bank of the Trent, crossed here by a fine aqueduct of the Grand Trunk Canal, 8 m. ESE. Stafford, and 122 m. NW. London, by London and North-Western railway. Area of par., 7,120 acres. Pop. 4,362 in 1861. The town is well built, comprising many good houses. The par. church, an ancient structure, with a handsome tower at its W. end, has been enlarged and almost rebuilt. The living is a vicarage in the gift of the dean and chapter of Lichfield. There are places of worship for different classes of dissenters, and several Sunday schools. A free grammar school was founded here by queen Elizabeth: an endowed school furnishes clothing and instruction to 35 boys; besides which there is a national and an infant school. Hopkins's Almshouses afford relief to aged poor women, and there are several money charities. The principal manufacture of Rudgeley is that of hats and felts; but other articles are made here. A stream, which runs through the town to the Trent, turns several colour and corn mills, and there are some iron forges. At Brereton, within the par., are extensive collieries, employing from 500 to 600 men. The town derives

considerable advantages from its position on the great line of canal communication between the N. and S. cos. Its government is vested in 2 constables chosen by the inhabs. Markets on Tuesday: fairs April 17, June 5, and Oct. 21, for horses and cattle.

RUGBY (an. *Rocheberie*, or *Rokeby*), a market town and bor. of England, co. Warwick, hund. Knightlow, on the Avon, 28 m. ESE. Birmingham, 75 m. NW. London by road, and 82½ m. by London and North-Western railway. Pop. 7,818 in 1861. The town, on an eminence S. of the river, consists of three streets, one of which, leading to the church, is broad, and lined with modern brick houses. Great improvements have been made within the last few years, and the advantages derived by the town from being a principal station on the North-Western railway seem likely still further to promote its prosperity. In the older part of the town, however, there are many houses of plaster and timber, denoting the former poverty of the place. The church is an ancient building, possessing little architectural interest, with a square embattled tower, having a turret at its SE. angle: the living is a rectory, of the annual value of £107., in the gift of Earl Craven. There are several district churches, of recent erection. The Wesleyan Methodists and Baptists have places of worship; and there are Sunday schools, a charity school for thirty children of each sex, with almshouses and other charities.

The chief importance of Rugby is derived from its great public school, to which the talent of several of its recent masters and the richness of its endowments have given a well-merited celebrity. It was originally a simple grammar school, founded in 1657, by Lawrence Sheriffe, citizen of London, a native of the neighbourhood, for the benefit of the town and neighbourhood of Rugby. Any person who has resided during two years in, or within, ten miles of the town, may send his sons to be educated free of expense; but if the parent reside out of the town, his son must then lodge at one of the boarding-houses of the school, paying the same rate for his board as those not on the foundation. The number of boys on the *foundation* is unlimited; but the masters may not receive more than 260 boys not on the foundation. The school property consists of land within the par., and of about eight acres of land, called the Conduit Close, in the neighbourhood of Lamb's Conduit Street, London, the value of which has so greatly increased, in consequence of the buildings erected upon it, that the annual revenues of the school, which, at the middle of last century, were under 120£. a year, now exceed 5,000£. The management is vested in twelve trustees, and the school is under a head master and eight classical masters, with subordinate teachers of writing, French, and other branches. The study of classical literature is carried quite as high as elsewhere, and the success of the boys at examinations for scholarships at Oxford and Cambridge, shows that their knowledge is of a substantial character; but at the same time, history, both sacred and profane, modern as well as ancient, physical and political geography, arithmetic and mathematics (as far as conic sections), and French, constitute integral parts of the course of instruction. An annual examination is held at Christmas, and the names of the boys that distinguish themselves are published in a class-paper. The school has fourteen exhibitions, established by the founder. Three exhibitioners are elected every year by the trustees on the report of examiners sent from the universities of Oxford and Cambridge. These exhibitions are of

the value of 60*l.* a year, and may be held for seven years *during residence* in any college at either university. There are likewise six scholarships, of the annual value of 25*l.* each, supported by subscription; one scholar is elected every year, and his age must not exceed 14½ years at the time of his examination. The scholarship is tenable for six years, if the boy holding it remains so long at Rugby. The ancient buildings of this great seminary consisted formerly of a master's house, and two or three school-rooms, all of very limited size and shabby exterior, totally inadequate to the wants of the increasing establishment. In 1809, however, the erection of a large and handsome pile of buildings was commenced on the site of the old school-house at the S. extremity of the town. The edifice is of white brick, dressed with stone at the angles, windows, and cornices, the whole being of Tudor architecture. The principal front is 220 ft. in length, and the schools are entered by a turreted gateway facing the street and leading to the principal court, a fine area, 90 ft. in length, by 75 ft. in breadth, having cloisters on three of its sides. The buildings on the S. side comprise the dining-hall of the head master's boarders, and three school-rooms; on the W. side is the great school-room, and on the N. side are schools for the French and writing classes. The apartments of the head master are handsome and commodious, communicating also with the various dormitories running round the quadrangle over the school-rooms. The school chapel is a detached building, in the later pointed style, the interior being fitted up with stalls and handsomely carved seats; the ceiling is decorated with paintings, and near the altar is the statue of Dr. James, a late head master, by Chantrey.

Rugby has no manufactures, and the inhabs. of the vicinity are principally agricultural. The trade of the town, however, has been greatly increased by the opening of the London and North-Western railway, and it is now an important *entrepôt* between the surrounding country and the metropolis. The Oxford canal passes also within a short distance of the town, connecting it with the principal inland navigation of England. On an eminence NE. of Rugby are some slight remains of a castle, supposed by Dugdale to have been erected in the reign of Stephen. Large markets on Saturday for corn and provisions; a great horse fair November 22, and twelve other fairs.

RUGEN, an island in the Baltic, belonging to Prussia, opposite to Stralsund, and separated from Pomerania by a strait varying from 1½ to 2 m. in width. It is of an exceedingly irregular shape, being deeply indented by bays and arms of the sea. Area, 361 sq. m. Pop. 46,746 in 1861. The island is very fertile, and sends annually large quantities of corn to Stralsund. Rugen differs much in appearance from the mainland part of Pomerania, its coasts consisting mostly of high, precipitous, chalky cliffs. It is well wooded, and being intercepted by ravines, as well as deep, narrow bays, its scenery is highly picturesque. This circumstance, and its facilities for sea-bathing, render it a favourite resort in summer. The inhabs. are primitive in their habits and manners, industrious, and frugal. They are principally of the reformed religion, and their language is a patois of low German intermixed with Swedish. The fishing in the adjoining seas and bays is very productive. Unfortunately the island has no good harbour, and its coasts are very dangerous. A lighthouse, having the lantern elevated 197 ft. above the level of the sea, has been

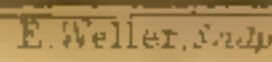
erected on the most northerly promontory of the island, in lat. 53° 41' 12" N., long. 13° 57' 27" E. Bergen, the capital, situated in the centre of the island, has 2,700 inhabs. After being long in possession of Sweden, Rugen became part of the Prussian dominions in 1815.

RUNGPOOR (*Rangapura*), a distr. of British India, presidency and province Bengal, between lat. 25° and 27° N., and long. 88° and 91° E.; having E. Assam, S. Mymensing and Dinajepoor, W. the latter and Purneah, and N. Sikkim and Bootan. Area, 7,856 sq. m. Pop. estim. at 1,400,000. It is wholly on the N. side of the Ganges, and is intersected by the Brahmaputra and Teesta. The climate is not so hot as in most other parts of Bengal; the soil is inferior to that of the Dinajepore district. Tobacco is the staple product. Wheat is also a considerable crop; barley, oats, maize, cotton, and indigo, are little grown. A good deal of cotton thread is, notwithstanding, spun in the district, the material being imported by way of Moorsshedabad. Hindoos and Mohammedans are supposed to be nearly equal in point of numbers. Chief towns Rungpoor, the cap.; Mungulhaut, Chilmary, and Goalparah. Rungpoor, in lat. 25° 43' N., long. 89° 22' E., has been estimated to have a pop. of from 15,000 to 20,000. For copious information respecting this district, and that of Purneah, the reader is referred to the surveys by Dr. Buchanan Hamilton, in 'Martin's British India.'

RUPPIN (NEW), a town of Prussia, prov. Brandenburg, gov. Potsdam, cap. circ., on the lake of its own name, 37 m. NW. Berlin. Pop. 11,098 in 1861, excl. of garrison of 1,250. The town is well built, and has a council-house, high school, hospital, central prison, barracks, and a large covered military exercising ground, with manufactures of woollen goods, gloves, and leather. Its trade is greatly facilitated by the Ruppin canal between the Havel and the Rhin, forming a link in the communication between the Elbe and the Oder.

RUREMONDE, or ROERMOND, a town of Belgium, prov. Limburg, cap. atrond., on the Meuse, where it is joined by the Roer, 37 m. NW. Maastricht. Pop. 8,425 in 1860. The town was dismantled by Joseph II.; but is still surrounded by ramparts, and is the residence of a military commandant. It is well built; is the seat of a court of primary jurisdiction, and a college; and has manufactures of woollen stuffs, and considerable trade.

RUSSIA, the most extensive, and one of the most powerful empires, either of ancient or modern times. It comprises the whole northern portion of the eastern hemisphere, from the frontiers of Posen and the Gulf of Bothnia on the W., to the Pacific Ocean and Behring's Straits on the E., or from the 18th to the 190th deg. of E. long., being a distance, on the 60th deg. of lat., of nearly 6,000 m. Its extent from N. to S., though less vast, is still very great, stretching from the 38th to the 70th, and in some parts to the 78th deg. of N. lat., exhibiting an average breadth of about 1,500 m. Exclusive of this, Russia claims a very large tract in the NW. part of America; and is mistress of Nova Zembla, and some other large islands in the Arctic Ocean, of the Aleutian Islands off Kamtschatska, and of the Aland Isles, in the Baltic. The superficial extent of the empire has not been determined with anything like accuracy. It was estimated by Hassel at 372,935 geog. sq. m., viz., Russia in Europe, including Finland, 72,869 sq. m.; Russia in Asia, 275,767 do.; and Russia in America, 24,000 do.; and Schnitzler in his 'Statistique Générale,' has adopted this esti-



mate. The latest and probably the most accurate estimate of the extent of the empire is that given, after official returns, by M. Koeppen, of the Academy of Sciences of Petersburg. According to this authority the area of the different divisions is as follows:—

| | Geog. Sq. Miles |
|---|-----------------|
| Russia in Europe | 90,117 |
| Northern Asiatic Russia, or Siberia | 225,780 |
| Southern Asiatic Russia, or Transcaucasia | 3,123 |
| Grand Duchy of Finland | 6,400 |
| Kingdom of Poland | 2,320 |
| American Colonies | 17,500 |
| Total | 345,240 |
| Or 7,612,874 Eng. sq. m. | |

The following table gives a view of the extent of the Russian dominions at different epochs:—

| | Geog. Sq. Miles |
|--|-----------------|
| In 1535, at the accession of John the Terrible | 37,200 |
| In 1585, at his death | 144,000 |
| In 1613, at the accession of Michael Romanoff | 148,000 |
| In 1645, at his death | 258,000 |
| In 1725, at the death of Peter the Great | 280,000 |
| In 1741, at the accession of Elizabeth | 325,000 |
| In 1796, at the death of Catherine II. | 335,000 |
| In 1855, at the accession of Alexander II. | 345,240 |

The Russian empire comprises one-seventh of the territorial part of the globe, and about one twenty-sixth part of its entire surface.

Face of the Country.—*Mountains.*—Russia is, in general, level, and comprises some of the most extensive plains in the world. That part of the empire which is in the eastern hemisphere is naturally parcelled into the two great divisions of European and Asiatic Russia, by the Oural Mountains, which stretch in a NNE. direction from the Caspian Sea to the Arctic Ocean, forming, through the greater part of their course, the boundary between Europe and Asia. The highest points in this chain have an elevation of about 6,500 ft. above the level of the Caspian. In all the vast country, extending on the W. side of this central chain to the confines of Poland and Moldavia, there is hardly a single hill. The Valdai hills, or elevated grounds, between Novgorod and Twer, where the Wolga, the Don, and the Dniepr have their sources, are nowhere more than about 1,200 ft. above the level of the sea, the country exhibiting a waving surface, and without any considerable elevations. There is nothing, in fact, save the forests, to break or interrupt the course of the wind, in all the immense space interposed between the Oural and the Carpathian mountains. The only great chain of mountains in western Russia is that of Caucasus, between the Euxine and Caspian Seas, and this is almost at the southern extremity of the empire. Siberia, or Asiatic Russia, consists principally of a vast plain, slightly inclining to the N. Towards the S. and E., however, it is in parts mountainous, being separated from Mongolia and Manchouria by high and little explored ridges, in which the great rivers that flow through it to the Arctic Ocean have their sources.

The most distinguishing feature in the appearance of Russia is her vast forests. Tegoborski, who estimates the surface of European Russia at about 500,000,000 of deciatines, supposes that 180,000,000 are occupied by forests. They are so very prevalent in the governments of Novgorod and Twer, between Petersburg and Moscow, that it has been said a squirrel might travel from the one city to the other without ever touching the ground. The forest of Volkonski, at the source of the Wolga, is the most extensive of any in Europe. In the government of Perm, on both sides the Oural mountains, contain 18,000,000 of deciatines, no fewer than 17,000,000 are covered by

forests. The forests of Asiatic Russia are also of vast size. In extensive districts, however, the surface is quite free from wood. This is particularly the case in the vast *steppes* or plains in the governments of Astrakhan and Omsk, which in many parts, indeed, are a mere sandy desert.

Rivers and Lakes.—The rivers of Russia are usually divided into five groups or systems, corresponding to the seas in which they have their embouchure, viz., the Arctic Ocean, the Baltic, the Black Sea, the Caspian, and the Pacific Ocean. The first division is by far the largest. It comprises, in Europe, the Dwina, Mezen, and Petchora; while in Asia it includes, among a host of others, the Obi, Jenisei, and Lena, three of the largest rivers of Asia. All these rivers run from S. to N., and the last three have a course of from 2,000 to 2,500 m. The rivers which fall into the Baltic, though of far greater importance in an economical point of view, are of very inferior magnitude. The principal are the Neva, which has Petersburg at its mouth, the Duna, and the Niemen. The rivers which fall into the Black Sea equal those falling into the Baltic in commercial importance, and far exceed them in length of course and volume of water. Among others are the Dniestr, Dniepr, Bug, Don, and Kuban. The basin of the Caspian has, however, to boast of the largest and most important of the rivers of Russia, the Wolga. This great river has its sources in the government of Twer, about 180 m. S. by E. from Petersburg: including sinuosities, its course is about 1,000 leagues, while that of the Danube is only about 450. It is of vast consequence to the internal navigation of the empire. The Caspian Sea also receives the Oural and the Emba.

Owing to the flatness of the country through which they flow, and the vast length of their course, the rivers of Russia are but little interrupted by cataracts, flow with a tranquil stream, and afford great facilities to internal navigation. The severity of the climate no doubt prevents, during a considerable portion of the year, all intercourse by water; and, as already stated, renders the rivers falling into the Arctic Ocean of comparatively little value. Luckily, however, the frost, which interrupts navigation, affords the greatest facilities to land travelling. The lakes, as well as the rivers, of Russia are upon a gigantic scale. The lake of Baikal, in the government of Irkutsk, in Asiatic Russia, is one of the most extensive in the world. In European Russia, the lakes of Ladoga, Onega, Peipus, Ilmen, and Bielo Ozero, are also of great extent, particularly the first. The duchy of Finland is almost everywhere interspersed with lakes, and they are very abundant in other provinces, particularly in that of Olonetz.

Soil and Climate.—These, it is obvious, must differ exceedingly in so vast a country. Some provinces mostly consist of sandy barren plains, or vast morasses. But the most valuable portion of the empire, or that included between the Baltic, the Gulf of Finland, and the Wolga, on the N. and E.; the Black Sea on the S.; and Austria and Prussia on the W., has, speaking generally, a soft black mould, of great depth, mostly on a sandy bottom easily wrought, and very fertile. In some places it inclines to sand and gravel; in many, from the want of drainage, it is peaty or boggy: in Livonia, and parts of Lithuania, it is clayey, but it nowhere inclines to chalk. 'Russia,' says a well-informed native writer, M. Pleschéyef, 'is divided into two great parts by the Oural mountains, which form an uninterrupted barrier through its whole breadth, and separate Siberia or Asiatic from European Russia. That part of Russia which lies on this side of the Oural mountains, presents

an immense plain declining westward by an easy descent. This plain, from its vast extent, has a great variety of climates, soils, and products. Its northern part, which sensibly declines towards the White and Frozen Seas, is covered with forests, marshy, and but little fit for cultivation. The other, and more southerly portion of this vast plain, includes the whole district along the Wolga, as far as the steppes or deserts between the Caspian and the Sea of Azov, and constitutes the finest part of Russia; generally it has a fertile soil, the arable and meadow land preponderating over the woods and marshes. That part of the country which extends towards Voroneje, Tambof, Penza, and Simbirsk, as far as the deserts, is most remarkable for the superior quality of every kind of fruit and other produce. It has everywhere an excellent soil, consisting of black earth, strongly impregnated with saltpetre. But the tract which commences between the Sea of Azov and the Caspian, and extends near the shores of the latter, and between the Wolga and Oural, as far as the Emba, is little better than a desert, being level, dry, high, barren, and full of salt lakes. The country lying on the other side of the Oural mountains, known by the name of Siberia, is generally a flat tract of vast extent, declining imperceptibly towards the Frozen Ocean, and rising thence by equally imperceptible degrees, towards its southern border, where at last it is lost in the immense mountain ranges which separate the Russian and Chinese empires. It is unnecessary to notice in detail the different great divisions of this vast territory. In general, it may be stated that the more southerly portion of Siberia, or that between the S. frontier of the empire and the 57th or 60th deg. of lat., as far E. as the river Lena, has, for the most part, a fertile soil, and that, notwithstanding the severity of the climate, it produces most kinds of grain. But, owing to the increase of cold and the nature of the soil, the more northerly portion of the region now noticed, or that extending from the 57th or 60th deg. of lat. to the Frozen Ocean, and the whole country E. of the Lena, from the frontier of Manchouria northwards, is wholly, or almost wholly, unfit either for cultivation, or for the grazing of cattle. In the E. a portion of this vast tract is mountainous, but it mostly consists of immense levels, full of swamps and bogs, covered with moss, which would be totally impassable were it not that the ice, which never thaws deeper than a few inches, gives a firm under footing.

Notwithstanding the heats that usually prevail during summer, especially in the southern provinces, cold, speaking generally, predominates very decidedly in Russia. With the exception, indeed, of the Crimea and the Transcaucasian provinces, no part of Russia can be said to be generally hot; and even in them the frost in winter is often very severe. The climate of Russia is, in fact, proverbial for its severity; and this increases not only as we advance towards the N., but also as we advance towards the E.; the cold being decidedly greater in Siberia than in the same latitudes in European Russia, a difference which is also sufficiently perceptible in the provinces of the E. and W. sides of the latter. This, no doubt, is owing to various causes; but principally, perhaps, to the greater cultivation of the western provinces and their proximity to the Baltic; and to the vast extent of frozen sea, and land traversed by the winds from the NE. Beyond the 65th degree of lat. the ground is covered with snow and ice for about nine months in the year; and during the other three months ice is always found at a little distance below the surface. Corn crops cannot be depended upon in European Russia beyond the

62nd degree of lat.; and the great agricultural provinces lie to the S. of the 58th deg. The fruits of temperate climates are seldom met with beyond the 52nd deg. At Petersburg, in lat. 59° 56', the mean maximum of cold is about 24°, and the mean maximum of heat 23°, Reaumur. The Neva is commonly frozen over before the end of November, and the ice never breaks up before the end of March. At an average of ten years it is calculated that there are annually at Petersburg 97 bright days, 104 rain, 72 snow, and 93 unsettled. At Moscow, in lat. 55° 45', the cold is more severe than at Stockholm in lat. 59° 20'. At Astrakhan, in lat. 46° 21', nearly the same as that of Lyons, the Wolga is sometimes frozen over so as to bear loaded waggons. The sea of Azov is usually frozen over from November to the beginning of April. In Siberia, as already stated, the cold is much more severe than in the provinces to the W. of the Oural mountains. The breaking up of the ice on the Lena does not take place before the beginning of May.

But this severe cold is not unhealthy, and is much less inconvenient than might be supposed. While the frost lasts the air is pure and bracing, and its severity is guarded against by warm clothing, and by having the houses properly constructed and heated. At Petersburg and Moscow the winter is, in fact, the finest season. The inhabs. seem to revive at its approach. Sledge-roads over the snow render travelling commodious and agreeable; and a winter journey in a moderate frost by moonlight is a high enjoyment. The Russian peasants care only for warm covering for their legs and feet. At Petersburg, in a frost of 25° Reaumur, it is common to see women standing for hours together washing their linen through holes dug in the ice over the Neva.

Spring can hardly be said to have any place in the Russian calendar. The transition from frost to fine weather is usually very rapid. In a brief period after the snow and ice have disappeared, the fields and trees are clothed in the livery of summer; and vegetation makes an extraordinary progress. At Petersburg the summer is as mild and agreeable as in the S. of France; but there and in all the N. provinces it is very variable. As we advance towards the S. it becomes steadier, and the heats increase. At Astrakhan the mercury in the thermometer sometimes rises to 108½° Fah.; and in the Transcaucasian provinces it rises still higher. The autumn, or the period of transition from summer to winter, is the most unpleasant season in Russia. The sky is generally cloudy, and rains and storms are very prevalent. The Crimea, from its high S. lat., and its being embosomed in the Euxine, has the most agreeable climate in the empire.

Divisions and Population.—The divisions of the Russian empire have differed materially at different periods. Peter the Great made some important changes in the distribution that had existed previously to his epoch. The whole, however, was remodelled and placed on a new footing, by Catherine II. in 1775. She divided the entire empire into three great regions; those of the North, Middle, and South. Each of these regions was subdivided into governments, of which there were at first 42, and at the end of her reign 50. Paul made some ill-advised changes on this distribution, which were set aside on the accession of Alexander I. The existing divisions were mostly fixed by the latter in 1822, nearly on the basis laid down by Catherine. The empire, exclusive of the kingdom of Poland, is divided into governments, exclusive of certain territories called provinces, or *oblasts*, not formed into governments. The sub-

joined table gives the area and population of the empire, according to the enumerations of 1846 and of 1858:—

| Governments | Area in Geo. sq. m. | Population in 1846 | Population in 1858 |
|----------------------------------|---------------------|--------------------|--------------------|
| Northern Provinces: | | | |
| Archangel . . . | 15,519 | 253,000 | 274,951 |
| Olonetz . . . | 2,784 | 263,100 | 287,354 |
| Vologda . . . | 6,967 | 822,200 | 951,593 |
| Great Russia: | | | |
| Petersburg . . . | 970 | 643,700 | 1,083,091 |
| Novgorod . . . | 2,213 | 907,900 | 975,201 |
| Pskof . . . | 810 | 775,800 | 706,462 |
| Smolensk . . . | 1,019 | 1,170,600 | 1,102,076 |
| Moscow . . . | 589 | 1,374,700 | 1,599,808 |
| Tver . . . | 1,224 | 1,327,700 | 1,491,427 |
| Yaroslaf . . . | 660 | 1,008,100 | 976,866 |
| Koetroma . . . | 1,496 | 1,054,600 | 1,076,988 |
| Nijni Novgorod . . . | 877 | 1,178,200 | 1,259,600 |
| Vladimir . . . | 862 | 1,246,500 | 1,207,908 |
| Riazan . . . | 767 | 1,365,900 | 1,427,299 |
| Tambof . . . | 1,202 | 1,750,900 | 1,910,454 |
| Tula . . . | 553 | 1,227,000 | 1,172,249 |
| Kaluga . . . | 573 | 1,006,400 | 1,007,471 |
| Orel . . . | 859 | 1,502,900 | 1,532,034 |
| Koursk . . . | 818 | 1,680,000 | 1,811,972 |
| Baltic Provinces: | | | |
| Esthonia . . . | 376 | 310,400 | 303,478 |
| Livonia . . . | 853 | 814,100 | 883,681 |
| Courland . . . | 496 | 553,300 | 567,078 |
| White Russia: | | | |
| Witepsk . . . | 810 | 789,500 | 781,741 |
| Mohilef . . . | 885 | 981,300 | 884,640 |
| Minsk . . . | 1,622 | 1,046,400 | 986,471 |
| Lithuania: | | | |
| Wilna . . . | 768 | 863,700 | 876,116 |
| Grodo . . . | 693 | 907,100 | 881,881 |
| Kowno . . . | 758 | 915,580 | 988,287 |
| Little Russia: | | | |
| Volhynia . . . | 1,297 | 1,445,500 | 1,528,928 |
| Podolia . . . | 774 | 1,703,000 | 1,748,466 |
| Kief . . . | 914 | 1,605,800 | 1,944,334 |
| Tchernigoff . . . | 1,000 | 1,430,000 | 1,471,866 |
| Pultawa . . . | 897 | 1,783,800 | 1,819,110 |
| Kharkoff . . . | 985 | 1,467,400 | 1,582,571 |
| Voroneje . . . | 1,209 | 1,657,900 | 1,930,839 |
| Don Cossacks . . . | 2,943 | 704,300 | 896,870 |
| New Russia: | | | |
| Ekaterinoslaf . . . | 1,196 | 870,100 | 1,842,681 |
| Kherson . . . | 1,332 | 842,400 | 1,027,459 |
| Taurida . . . | 1,163 | 572,200 | 687,343 |
| Bessarabia . . . | 838 | 792,000 | 919,107 |
| Volga & Caspian Prov. | | | |
| Kasan . . . | 1,128 | 1,342,900 | 1,543,344 |
| Pensa . . . | 690 | 1,087,200 | 1,888,535 |
| Simbirsk . . . | 1,315 | 1,318,900 | 1,140,973 |
| Saratof . . . | 3,525 | 1,718,600 | 1,636,135 |
| Astrakhan . . . | 2,860 | 284,400 | 477,492 |
| Caucasus . . . | 2,650 | 526,400 | 915,152 |
| Oural Provinces: | | | |
| Orenbourg . . . | 6,773 | 1,948,500 | 2,036,581 |
| Perm . . . | 6,073 | 1,637,700 | 2,046,572 |
| Viatka . . . | 2,500 | 1,662,800 | 2,123,904 |
| Siberia: | | | |
| Tobolsk . . . | 223,780 | 2,937,000 | 4,070,938 |
| Toomsk . . . | | | |
| Irkutsk . . . | | | |
| Yakutsk . . . | | | |
| Kamchatka . . . | | | |
| Okhotsk . . . | 3,123 | 2,648,000 | 4,003,766 |
| Yeniseisk . . . | | | |
| Transcaucasia . . . | 6,400 | 1,412,315 | 1,724,193 |
| Grand-duchy of Finland . . . | 2,320 | 4,857,700 | 4,790,379 |
| Kingdom of Poland . . . | 17,500 | 61,000 | 72,375 |
| Russian America . . . | | | |
| Grand Total | 343,240 | 66,008,315 | 73,992,373 |

Animal and Vegetable Products.—The animals of Russia include those commonly met with in the arctic circle, and in temperate climates, as well as some of those belonging more peculiarly to the intertropical regions. Exclusive of horses, oxen, and sheep, rein-deer and camels are both met with. The latter are employed in travelling

through the deserts in some of the S. provs., while the former constitute the principal wealth of the Samoiedes, Tungusians, Ostiaks, Tchouktchis, and other tribes inhabiting the extreme N. parts of the empire. The dog is common everywhere; and in parts of Siberia, where there are neither horses nor rein-deer, is of the very greatest utility; and besides being employed for draught and burden, is used as food. Bears are abundant; beavers and other fur-bearing animals are also common; and in many provs. the chase forms a principal part of the occupation of the people. The rivers and lakes swarm with fish.

All sorts of corn succeed in Russia; though, as already stated, the crops cannot be depended upon above the 62nd deg., nor is cultivation attempted in any part of the empire beyond the 65th deg. Fruits of all sorts are abundant in the S. provs. The vine is cultivated in the vicinity of Astrakhan, in the Crimea, and in the Caucasian provs.; but the wine made from it is of a very low quality. Though meadows are not abundant in Russia, the pastures in most parts are excellent. The forests will be afterwards noticed.

Minerals.—Russia has for a lengthened period produced considerable supplies of the precious metals; but her importance in this respect has increased prodigiously of late years, and she now supplies a larger quantity of gold than any other European or Asiatic country. It is partly obtained from mines mostly situated in the Oural Mountains; but it is principally obtained from the auriferous sands of various rivers in Siberia, which have their sources in the Altai Mountains.

| | Public Mines Poods | Private Mines Poods |
|---------------------|------------------------|---------------------|
| Oural mines . . . | 129·58 | 185·07 |
| | Public Wash | Private Wash |
| Siberia mines . . . | 58·08 | 1,304·85 |
| Total . . . | 1,677·53 Poods. | |

Iron is produced in various parts of Russia, but principally in the governments of Perm, Orenbourg. The production of iron has increased very slowly, and the supply is altogether inadequate to the wants of the empire. It is all smelted by means of wood, and being principally produced at a great distance from the provinces where it is most in demand, it is extremely high-priced. And hence, as foreign iron is excluded by high duties, that article, a cheap and abundant supply of which is so indispensable to anything like success in their agriculture or manufactures, is placed beyond the reach of those by whom it would otherwise be most extensively employed. Cast-iron articles are prepared at most mines where there are forges. There is an important cannon manufactory at Petrozavohsk, in the government of Olonetz, which was brought to a high state of perfection by an Englishman of the name of Gascoigne. But the principal hardware manufactories are carried on at Tula, in the government of that name. (See Tula.) A great variety of articles of cutlery are produced, and the Imperial manufactory of fire-arms is very extensive, employing about 7,000 male and 9,000 female workers.

Russia is abundantly supplied with mines of salt and brine springs, but as most of them are at a great distance from the Baltic and western provs., there is a large importation of salt mostly from England. The salt mines and brine springs are principally situated in the governments of Taurida (the Crimea), Orenbourg, and Saratoff. At present the supply of native salt is estimated at about 31 million poods, of which, by far the greater part is furnished by mines and springs

belonging to the crown. The imports may be reckoned at about 7 millions poods.

Coal, though scarce in Russia, has been found on the shores of the Sea of Azoff and in other localities. Hitherto it has been wrought only to a small extent, the entire produce of the mines not being supposed to exceed 3 million poods. But the importance of steam, and consequently of coal, in naval warfare, has become so great, that extraordinary efforts are being made to increase the produce of this valuable mineral.

Agriculture.—Landed property in Russia is generally divided into estates either of the crown or the nobility; those belonging to the former being little less extensive than those belonging to the latter. Some nobles have very large estates, though, owing to the compulsory division of landed property among the children of a family on the death of the father, this is not generally the case; and in some districts the too great subdivision of the land is an evil which has already made itself manifest. The value of a Russian estate formerly depended more on the number of labourers or slaves belonging to it, and which may be either sold, or let out by the proprietor, than on its extent, or the quality of the soil: but since the emancipation of the serfs this has ceased to be the case. By an imperial decree of March 3, 1861, coming into final execution on March 3, 1863, serfdom was abolished, under certain conditions, within the whole of Russia. The owners of the serfs were compensated for their loss by a payment regulated in the following manner. The previous labour of the serf was estimated at a yearly rental of 6 per cent., so that for every six roubles which the labourer earned annually, he had to pay 100 roubles to his master as his capital value to obtain his freedom. Of this sum, the serfs had to give immediately 20 per cent., while the remaining 80 per cent. were disbursed as an advance by the government to the owners, to be repaid, at intervals extending over forty-nine years, by the freed peasants. According to an official report, the whole of these arrangements were completed at the end of July, 1865, so that from this date serfdom ceased to exist in Russia.

The government, as a consequence of the emancipation of the serfs, took measures in 1864–5 for the diffusion of instruction among the agricultural population. An additional budget of 450,000 roubles was decreed for the year 1865, by which the budget of public instruction was raised to about 1,300,000 roubles. This supplementary budget provides for the founding of village schools, of 11 new gymnasia (colleges); for the purchase of books and paper for the poorer peasants; for supplementary payment to schoolmasters and professors; for the purchase of scientific instruments; for the establishment of laboratories and museums; for the foundation of a polytechnic school; and for other schools for teaching agriculture and horticulture.

Besides the 22,000,000 of serfs belonging to private owners, there were, according to a census taken some years ago, 22,225,975 crown peasants—that is 10,583,638 men, and 11,641,437 women. The emancipation of this class began previous to that of the private serfs, and was all but accomplished on September 1, 1863. By an imperial decree of July 8, 1863, land was granted to the peasants on the private and appendage estates of the crown, and to the peasants who belonged to the imperial palaces, which they are to pay for in forty-nine years in instalments, each equal in amount to the 'obrok,' or poll-tax formerly yielded by them. The peasants on these crown estates, about 2,000,000 in number, were thereby elevated to the rank of rent-paying peasants, a situation in

which they will remain for 49 years, when they become freehold landowners.

An important, though not very numerous class of the population of Russia are the foreign settlers which the government succeeded in attracting to the country at various periods. The enormous extent of excellent but waste land, and the small and thinly-scattered population in all parts of the empire, naturally suggested the idea to the government of bringing these deserts into cultivation by inviting colonists from other countries. Ivan Vasilievitch invited Germans to Moscow, of which the German 'Sloboda' still affords evidence. Michael Fedorovitch, in 1617, brought several thousand inhabitants from Finland and Carelia, and established them between Tyer and Moscow. Peter I. settled a great many Swedish prisoners, and in 1705, after the capture of Narva and Dorpat, carried away about 6,000 of the inhabitants, and planted them in scattered parties in various parts of the empire. But Catherine II., immediately after the commencement of her reign, conceived the idea of 'peopling with immigrant foreigners the desert and waste lands of the southern provinces of the empire, and through them of disseminating industry and agricultural science among her subjects,' as it is expressed in the ukase of 1763.

The first colonists received from the Russian government the necessary travelling expenses from their homes to their places of destination; they were allowed the importation, duty-free, of their effects, to the value of 300 silver roubles; they had houses built at the expense of the crown; and they had provisions and money for the first year, and a large sum as a loan, without interest for a certain number of years. These last privileges have not been granted to the same extent to all subsequent colonists.

A return made some years ago stated the number of colonies in the empire, inhabited by settlers who had not yet become quite nationalised, as follows:—

| Provinces | Number of the Colonies or Villages | Population | | |
|------------------|------------------------------------|----------------|----------------|----------------|
| | | Males | Females | Total |
| Bessarabia . . | 105 | 38,995 | 35,478 | 74,473 |
| Kherson . . . | 55 | 20,796 | 19,795 | 40,591 |
| Cis-Caucasia . . | 3 | 236 | 245 | 481 |
| Georgia . . . | 7 | 1,201 | 1,187 | 2,388 |
| Ekaterinoslaf . | 47 | 6,750 | 6,547 | 13,297 |
| St. Petersburg . | 13 | 1,522 | 1,513 | 3,035 |
| Saratof . . . | 102 | 63,717 | 63,311 | 127,028 |
| Taurida . . . | 80 | 12,237 | 11,323 | 23,560 |
| Tchernigof . . | 8 | 862 | 890 | 1,752 |
| Voronezh . . . | 1 | 631 | 600 | 1,231 |
| Total . . | 421 | 146,947 | 140,889 | 287,836 |

Agriculture in Russia is at a very low ebb. But it differs materially in different provs.; and some estates, even in the most backward provs., have been greatly improved. In Livonia, and the provs. bordering on the Baltic, and also in parts of the Ukraine, the husbandry is very superior, and the implements quite equal to the best that are to be met with in most parts of Germany. But, with the exception of a few estates, it is quite otherwise in the rest of the empire. The plough, owing to the high price of iron, is usually a wretched implement drawn by one horse, and calculated rather to scratch than to turn up the soil. The harrow is made of wood; and rollers and hoeing machines are entirely unknown. Were it not that the soil is generally light, friable, and very easily wrought, it would be impossible to cultivate it by such

means. But these suffice ■ make it produce more than enough for the wants of the inhabs. There is not, indeed, another country in Europe where corn crops may be raised at so little expense of labour as in Russia.

Exclusive of the sandy deserts of the south, vast tracts in the northern parts of the empire are, and always must be, unsuceptible of cultivation. Taking the whole surface of European Russia and Poland at 500 millions of deciatines, M. Tegoborski (*Forces Productives de la Russie*, i. 53) supposes it to be divided as follows, viz. :—

| | Deciatines |
|--|-------------|
| Cultivated Lands | 90,000,000 |
| Meadows | 60,000,000 |
| Forests | 180,000,000 |
| Pastures | 50,000,000 |
| Waste Lands, inc. Heaths, Marshes, Lakes, Rivers, and Roads . . . | 120,000,000 |
| Total | 500,000,000 |

The products vary, of course, with the difference of soil and climate. All sorts of corn are raised; but rye being the common food of the peasantry, it is produced in much greater quantities than any other sort of grain. Next to rye is oats; and the value of the crops of these two, taken together, is supposed to be more than double the value of the crops of wheat, barley, and every other kind of corn. Orel, Kasan, Nijni Novgorod, Penza, Tambof, and Kursk are the most productive provs.; and it is in them that the greatest quantity of wheat is raised. According to the estimate of Tegoborski, the total produce of the crops of all sorts of grain in European Russia (including Poland) may be taken, in ordinary years, at about 260,000,000 chetwerts (186,875,000 qrs.). The return is supposed to be about four times the seed. But in the best districts, wherever the land is moderately well cultivated, the produce is much greater; and is, indeed, nowise inferior to that of the most favoured countries. Corn in Russia is very frequently kiln-dried in the sheaf, before it is either stacked or thrashed. Tegoborski reckons the average price of the different varieties of corn at 3 roub. 50 cop. (silver) per chetwert; making the total annual value of the produce of grain 910 million roubles (silver), or 144,083,333*l.* sterling. Taking the empire at an average, the produce of the crops is not supposed to differ very widely in different years. But in the provs. there are, in this respect, the most extraordinary discrepancies; the crops being occasionally most luxuriant in some, when in others they are all but totally deficient. And hence it not unfrequently happens, owing to the want of easy communications between them, that while one part of the empire is glutted with corn for which there is no demand, another is suffering all the evils of scarcity. Contrary, perhaps, to what might be expected, the crops suffer more from droughts than from rains. Flax and hemp are very extensively cultivated; and, besides what is made use of at home, are very largely exported. Potatoes, though happily not very popular, succeed almost everywhere; and this, also, is the case with hops. Tobacco is confined to the S. provs., where it is an important article. The culture of beet-root has made considerable progress, especially in the government of Kieff.

It deserves to be mentioned, to the credit of the government, that it has latterly been exerting itself in the most efficient manner for the improvement of agriculture. Professorships of agriculture have been established in the different universities; and an institution to which a model farm is attached has been established near Mohilew for educating 120 pupils, so as to fit them to act as stewards or managers of large estates.

Horses are very abundant in Russia. Speaking generally, they are coarse and ill shaped, but hardy and active. In the southern provinces, however, whence the cavalry horses are brought, the breed is very superior; and great efforts have latterly been made to effect an improvement in the breeds in most parts of the empire. The khans or cheiks of the nomadic tribes occasionally possess as many as 10,000 horses. There is no country of Europe where so many cattle are reared as in Russia, and none where they are taken so little care of. Exclusive of the numerous herds, which constitute a principal part of the wealth of the pastoral and nomadic tribes, every peasant has a few head, and even the beggar has a cow or a goat. The ordinary Russian ox is small, lean, and bony; but those of the Ukraine, Podolia, Volhynia, and some other provinces, are large and of a very fine breed. Many thousand head are annually sent from the Ukraine to Petersburg and other Russian towns, and also to Silesia and Germany. Tallow is at present, and has been for many years, a most important article of export from Russia. The wool of the common Russian sheep is hard and coarse; but latterly considerable efforts have been made to improve the breed by importing fine-woolled sheep from Germany; and wool, notwithstanding the increase of factories at home, has become a considerable article of export. It is doubtful, however, whether the wool of Russia will be able to keep its ground in foreign markets in competition with the wool of Australia. Speaking generally, the climate is too moist for the production of fine wool, and too little attention is paid to the cleaning and assorting of the fleece. Epidemic diseases are, also, very prevalent, and the *rinderpest*, which was brought into England in 1869, and made such sad havoc among English cattle, was known many years previous in Russia, where it destroyed hundreds of thousands of animals. Hogs are everywhere abundant, and, in the northern provinces especially, furnish a principal part of the food of the people, while their bristles are an important article of export. Goats are also abundant. The following is an estimate, based upon official returns, of the number of horses, horned cattle, sheep, hogs, &c., in Russia in Europe.

| | | | |
|-------------------------|------------|---------------------------|---------|
| Horses | 15,805,782 | Deer | 115,862 |
| Horned Cattle | 19,925,926 | Camels | 38,760 |
| Sheep | 35,666,598 | Asses and Mules | 3,159 |
| Goats | 1,188,173 | Buffalos | 1,588 |
| Hogs | 8,689,988 | | |

The rearing and management of bees is more attended to in Russia than in any other European country, and is, in fact, the principal occupation of several tribes. The wild bees, however, greatly exceed those that are domesticated. Their culture is principally attended to in the provinces of Kasan and Ourfa. Individuals among the Baschkirs possess 100 hives in their gardens, and upwards of 1,000 in the forests. Honey is very extensively used in many parts instead of sugar. The export of wax is very considerable.

The forests of Russia are of vast extent and importance. They are, however, very unequally distributed over the country, many of the apparently boundless steppes in the S. governments being, as already stated, wholly destitute of wood. In some parts, too, especially in the vicinity of the great towns and navigable rivers, timber is become scarce from the reckless and improvident manner in which it has been cut down. But measures have been taken to obviate this abuse; and with ordinary care the forests may be said to be inexhaustible.

Manufactures.—The manufactures of the empire

are not generally in an advanced state. Since the reign of Peter the Great, their improvement and extension have, it is true, been favourite objects with the government; and heavy duties and prohibitions have, in consequence, been imposed on such foreign articles as it was supposed might interfere with similar articles of native growth. But the slavery of the peasantry, only recently abolished, was long an obstacle to the formation of those habits of industry, perseverance, and invention necessary to insure success in manufactures; while the thinness of the population, the variety of natural products, and the fertility of the soil, all concur in pointing out agriculture, including under that term mines and fisheries, as the natural and most advantageous employment that can be carried on upon a great scale, till civilisation be more generally diffused. Among the peasantry generally, there is little or no subdivision of labour. Each family commonly supplies itself with all the clothing and furniture which it requires. Sometimes, however, a person superadds some particular employment to his ordinary avocations; and sometimes this principle is carried farther, and the inhabs. of entire villages devote themselves to some particular trade. The versatility of the Russian peasant is astonishing. He is truly a Jack of all trades, and will turn his hand to whatever may be required. 'He will plough to-day,' says an observer (Venable's Russia, p. 141), 'weave to-morrow, help to build a house the third day, and the fourth, if his master need an extra coachman, he will mount the box, and drive four horses abreast as if it were his daily occupation. None of these operations, except, perhaps, the last, will be as well performed as in a country where the division of labour is more thoroughly understood. They will all, however, be sufficiently well done to "serve the turn," a favourite phrase in Russia. The people are very ingenious, but perseverance is wanting; and though they carry many arts to a high degree of excellence, they generally stop short of perfection; and it will be very long before their products can come into competition, for finish, durability, or cheapness, with English goods.'

In certain departments, however, Russia is not merely equal, but even superior to other countries. Her leather is excellent; and for some purposes, such as book-binding, is equal, if not superior, to any other material. The process followed in the preparation of this important article has been often described; and foreigners have frequently engaged in the business in Russia, with the view of making themselves acquainted with the details, that they might undertake it at home. But, whether it be owing to something in the bark or the water, or to some other undiscovered cause, none of the attempts to produce Russia leather in foreign countries have succeeded, and Russia continues to enjoy a monopoly of this valuable product, and to export it in large quantities. The sail-cloth, cordage and canvass, tick, felt, mats, potashes, soap, candles, caviar, isinglass, spirits, and some other articles produced in Russia, are quite as good, or better, than those of any other country.

So late as 1788, almost all the cloth required for the clothing of the army was imported from abroad; but it is now wholly manufactured at home. Cloth of a superior quality is also made at Moscow and its vicinity, at Iamburg, near Petersburg, Sarepta, and other places; but, generally speaking, it is inferior to what might be imported, and much dearer. The manufacture of flax and hemp is the best suited of any to the condition of the country, and is by far the most extensive and

prosperous. It is very widely diffused, there being few villages in which it is not carried on to some extent; but linen may be said to be principally manufactured in Vladimir, Kostroma, Moscow, and Kalouga; and sail-cloth and cordage in Archangel and Orel. The silk manufacture of Moscow is extensive, and it is carried on to a less extent in other towns. The glass manufacture has, also, made a rapid progress. Single plates have been made at the Petersburg glass-works, which have sold for 600*z.* each. The glass-works of the brothers Maltzoff, in Tula and Twer, are deservedly celebrated. The manufacture of snuff and cigars, potash, and soap, has rapidly increased. Paper, coarse and fine earthenware, and jewellery, are produced at Moscow, Petersburg, and other places.

The cotton manufacture has, also, been largely extended, though this extension is an undoubted result of the oppressive duties laid on cotton goods and yarn when imported, and affords no evidence of any real improvement. To suppose, indeed, that a country like Russia, without coal, without improved means of communication, with iron at an exorbitant price, and with slaves for workpeople, should attain to anything like excellence and cheapness in the finer description of manufactures, would be to suppose what is plainly contradictory. Haxthausen, Tegoborski, and other well-informed writers by no means unfriendly to Russia, admit that the attempt to force the premature growth of manufactures, which cannot be successfully carried on except upon a large scale, by means of skilled labourers and the most ingenious machinery, has been and continues to be most injurious to all her best interests. It draws away capital and intelligence from those pursuits in which she has every capacity to excel, to others in which it is impossible she should succeed. The real wealth of the empire consists in her raw products and coarse fabrics, which might be increased, under a free commercial system, to any imaginable extent.

M. Tegoborski gives the following statement with regard to the value of the manufactured products annually produced in Russia, and the number of people employed in their production:—

| Species of Manufacture | Total Value of Produce | Value added by Industry after deducting Value of Raw Material | Number of Men, Women, and Children employed |
|----------------------------------|------------------------|---|---|
| Flax and Hemp . . | 112,000,000 | 75,500,000 | 4,500,000 |
| Leather and its applications . . | 96,200,000 | 64,940,000 | 400,000 |
| Iron do. | 50,000,000 | 45,500,000 | 825,000 |
| Cotton Manufacture | 56,000,000 | 35,600,000 | 260,000 |
| Woollen do. . . . | 46,000,000 | 29,500,000 | 300,000 |
| Spirits | 30,000,000 | 12,000,000 | 100,000 |
| Soap, Candles, &c. . | 20,000,000 | 8,000,000 | 7,000 |
| Tobacco | 17,500,000 | 13,500,000 | 6,500 |
| Silk Manufacture . | 15,000,000 | 7,500,000 | 40,000 |
| Copper do. | 7,500,000 | 5,000,000 | 7,500 |
| Plate and Jewellery | 7,500,000 | 2,500,000 | 4,000 |
| Beet-root Sugar . . | 7,200,000 | 5,700,000 | 48,000 |
| Paper, Books, &c. . | 6,000,000 | 4,500,000 | 18,000 |
| Bricks and Tiles . . | 5,000,000 | 1,500,000 | 15,000 |
| Glass, Crystal, &c. . | 2,500,000 | 1,500,000 | 10,000 |
| Beer | 2,400,000 | 1,000,000 | 16,000 |
| Pottery, Porcelain, &c. . | 2,000,000 | 1,500,000 | 6,000 |
| Chemical Products . | 2,000,000 | 1,000,000 | 1,200 |
| Sealing-wax . . . | 1,200,000 | 500,000 | 500 |
| Total | 486,000,000 | 316,740,000 | 6,064,700 |

The manufacture of flax and hemp being in great measure a domestic manufacture, the 4,500,000 persons said to be employed in it must have been

partly, also, and no doubt, principally, employed in other pursuits.

Industrial pursuits are quite free in Russia. There are no internal monopolies, save those of salt, spirits, and playing cards. There is nothing in the guilds, or corporations, to check competition; and all may exercise any art or profession, either in town or country, as may be most agreeable to themselves. Since 1836, lectures have been instituted in all the Russian universities, for the instruction of manufacturers or handicraft-tradesmen in mechanics and chemistry. Moscow has become the grand seat of the manufacturing industry of the empire. From being principally inhabited by nobles and their dependents, the city is now principally inhabited by manufacturers and traders.

Commerce.—The commerce of Russia is already, notwithstanding the long paralysing influence of the prohibitive system, very extensive. But this system is now being modified; and trade will, no doubt, continue to increase with the growing wealth and population of the empire, and according as more liberal principles may prevail. The principal articles of export are tallow, which is more largely exported from this than from any other country; grain, particularly wheat; hemp and flax; timber, potashes, bristles, linseed and hempseed, linseed and hempseed oils, wool, leather; fox, hare, and squirrel skins; canvas and coarse linen, cordage, caviare, wax, isinglass, furs, and tar. The principal imports are sugar, cotton, cotton stuffs and yarn; machinery and mill work; hardware and iron; coffee; indigo and other dye-stuffs; woollens, oils, spices, wine, tea, lead, and tin; coal and salt in large quantities; linens and silks.

The subjoined table gives the total value of the imports and exports (exclusive of specie) of the Russian empire, in each of the years 1858 to 1862.

| Years | Imports | | Exports | |
|-------|--------------|------------|--------------|------------|
| | Stl. Roubles | £ | Stl. Roubles | £ |
| 1858 | 149,383,950 | 23,652,459 | 151,175,645 | 23,926,144 |
| 1859 | 159,331,166 | 25,227,910 | 165,661,672 | 26,230,240 |
| 1860 | 150,303,403 | 25,223,039 | 181,383,281 | 28,719,020 |
| 1861 | 167,111,131 | 26,459,263 | 177,179,985 | 28,053,498 |
| 1862 | 152,869,978 | 24,204,413 | 180,429,825 | 28,568,056 |

The following table shows the total value of imports (exclusive of specie) by each frontier of the Russian empire, and total amount of import duty received, in the year 1862.

| Frontiers | Imports in 1862 | |
|--|-----------------|------------|
| | Stl. Roubles | £ |
| By the White Sea | 538,959 | 85,335 |
| „ Finland | 2,762,120 | 437,336 |
| „ the Baltic | 76,996,879 | 12,191,173 |
| „ the European Land } Frontier (inclusive of Poland) | 33,473,362 | 5,299,949 |
| „ Black Sea and Sea of } Azov | 14,223,963 | 2,252,127 |
| Total into European Russia | 127,995,283 | 20,265,920 |
| By Trans-Caucasian Fron- tier | 5,813,966 | 920,545 |
| „ Astrakhan | 932,539 | 147,652 |
| „ Orenburgh and Siberia | 9,387,869 | 1,486,413 |
| „ Kiachta | 8,740,321 | 1,383,684 |
| Total into Asiatic Russia | 24,874,695 | 3,933,494 |
| Total | 152,869,978 | 24,204,413 |
| Amount of Duty received | 29,322,669 | 4,642,756 |

The total value of exports (exclusive of specie) by each frontier, and the amount of export duties, were as follows:—

| Frontiers | Exports in 1862 | |
|--|-----------------|------------|
| | Stl. Roubles | £ |
| By the White Sea | 7,026,058 | 1,112,455 |
| „ Finland | 7,150,934 | 1,132,231 |
| „ the Baltic | 72,965,240 | 11,552,830 |
| „ the European Land } Frontier (inclusive of Poland) | 25,627,961 | 4,057,761 |
| „ Black Sea and Sea of } Azov | 54,350,778 | 8,605,540 |
| Total from European Russia | 167,120,971 | 26,460,817 |
| By Trans-Caucasian } Frontier | 2,971,601 | 470,504 |
| „ Astrakhan | 430,410 | 68,149 |
| „ Orenburgh and Siberia | 5,515,337 | 873,261 |
| „ Kiachta | 4,391,506 | 695,822 |
| Total from Asiatic Russia | 13,308,854 | 2,107,236 |
| Total | 180,429,825 | 28,568,056 |
| Amount of Duty received | 1,837,383 | 290,919 |

The principal trading ports are Petersburg and Riga, on the Baltic, but particularly the former; Archangel, on the White Sea; Odessa, on the Black Sea; Tanagerog, on the Sea of Azov; and Astrakhan and Baku, on the Caspian Sea. Moscow is the principal entrepôt of the interior commerce of the empire. The trade with China is mostly carried on through Kiachta; and the fair of Nijni Novgorod is celebrated all over Europe. There are also very large fairs at Irbit, Kharkoff, Poltawa, and other towns.

Communications.—Down to a late period, the communication between Petersburg to Moscow was maintained by a road which was justly said by Lord Londonderry (Tour, i. 144) to be a most magnificent public work. It was nearly 500 m. in length, quite level, about double the width of the Great North Road in England, and was macadamized throughout, and kept along the whole line in perfect repair. But this great work must now be rendered comparatively useless, the two capitals having been connected by a railway. Other lines of railway connect the capital with Wilna, Warsaw, Riga, Orel, and the other chief towns of the empire; but, excepting these and a few other principal lines, there is a great want of good roads in Russia. This, however, is productive of less inconvenience than might be expected, from the circumstance of the frost rendering the worst roads fit for sledge travelling for a considerable period of the year; and from the number of navigable rivers, and the extension that has been given to their navigation by the construction of numerous canals. By these means a water communication has been effected between the great navigable river the Wolga, which has its embouchure in the Caspian Sea, and Petersburg and Archangel: the Wolga has also been united with the Don, which falls into the Sea of Azov. The Pripet, an affluent of the Dniepr, which falls into the Black Sea, has been connected with the Bug, an affluent of the Vistula, while the latter has been connected with the Niemen.

Few countries have so extensive a command of internal navigation as Russia. Goods put on board in Petersburg may be conveyed to Astrakhan, a distance of above 1,400 m., or to any port on the Caspian, and *vice versa*, without once being landed. The iron and furs of Siberia and the teas of China are received at Petersburg in the same way; but,

owing to the great distance of these countries, and the short period of the year during which the rivers and canals are navigable, they sometimes take three years in their transit. Immense quantities of goods are conveyed during winter upon the ice, in sledges, to the different ports, and to the nearest *pristans*, or places in the interior where barks are built for river or canal navigation. They are put on board in anticipation of the period of sailing, that the barks may be ready to take advantage of the high water, by floating down with the current as soon as the snow and ice begin to melt. The cargoes carried up the river into the interior during summer are principally conveyed to their ultimate destinations by the sledge roads during winter. The conveyance by the latter is generally the most expeditious; and it, as well as the internal conveyance by water, is performed at a very moderate expense.

The barks that come from the interior are mostly of a very rude construction, flat-bottomed, and seldom drawing more than 20 or 30 inches water. When they arrive at their destination, they are sold or broken up for fire-wood. Those that leave the ports for the interior are of a superior description, and are comparatively few in number; the commodities imported being, at an average, of much greater value, relatively to their bulk and weight, than those that are exported.

Accounts in Russia are kept in roubles and kopecks. The silver rouble, worth about 3s. 2d. Eng., is divided into 100 kopecks, and is equivalent to 8½ paper roubles. The only gold coin is the demi-imperial, value 5 roubles, or nearly 16s. Since 1828, platina coins, worth about 1½ sterling, have been struck; but they are not yet of any practical importance. The Russian lb. is rather larger than the avoirdupois lb.; the last = 13·8 quarters; the *chetvert*, the measure for corn, = 5·75 Eng. bushels; the *deciatine*, land measure, = about 2·7 acres; the *verst* of 104·5 to a geog. degree = 1,167 yards, 3 versts being about equivalent to 2 Eng. m.

Every Russian carrying on trade must be a burgher, and have his name registered in the burghers' book. All whose names are in this book are either townsmen who have property within the city, or members of a guild. There are three guilds. Those who belong to the first must possess 15,000 silver roubles; they may engage in all sorts of commercial transactions, may establish banks, fit out privateers in case of war, and drive about the city in carriages drawn by two horses. Those belonging to the second guild declare themselves possessed of 6,000 roubles; they are not confined to inland trade, but they can only import foreign goods worth 90,000 roubles. A capital of 2,400 roubles entitles its owner to admission into the third guild, which comprises shopkeepers and petty dealers. The rates paid by the members of these guilds amount to 1 per cent upon their declared capital, the 'statement of which is left to the conscience of every individual.' Burghers are not obliged to serve in the army, but may provide a substitute, or pay a fine. The *guests*, or foreign merchants, who enrol themselves in the city register on account of their commercial affairs, enjoy privileges nearly similar to those enjoyed by the members of the first guild.

None but native Russians are allowed to engage in the internal trade of the country; and hence a foreigner who imports goods into Russia must sell them to Russians only, and at the port where they arrive. A few foreigners, indeed, settled in Russia, and having connections with the natives, trade with the interior; but it is contrary to law, and the goods are liable to be seized.

The merchants engaged in foreign trade are

mostly foreigners, of whom the English are the principal. The peculiar privileges formerly enjoyed by the latter are now nearly obsolete, and their rights, in common with those of other foreigners, are merely those of guests. The English factory at Petersburg is, at present, little else than a society formed of some of the principal English merchants, several of whom, however, do not belong to it: its power extends to little else than the management of certain funds under its control.

Owing to the scarcity of capital in Russia, goods, the produce of the country, are frequently paid in advance; and foreign goods are most commonly sold upon credit. From the month of November to the shipping season in May, the Russians who trade in flax, hemp, tallow, bristles, and iron, either come themselves to Petersburg or Riga, or employ agents to sell their goods to foreigners, to be delivered, according to agreement, in May, June, July, or August. The payments are made according to the circumstances of the sellers and buyers: sometimes the buyer pays the whole amount, in the winter months, for the goods which are to be delivered in the summer or autumn; and sometimes he pays a part on concluding the contract, and the residue on delivery of the goods. The manufacturers and dealers in linen usually come to Petersburg in March, and sell their goods for ready money.

Government.—In Russia all power emanates from the czar, whose authority is uncontrolled, except by the respect he may yield to established customs, the privileges of certain classes, and the prejudices of the people. The will of the monarch has no legal limits, so that he may be said to be absolute. The act of election of 1613, which conferred the crown on the house of Romanof, recognises the unlimited power of the sovereign. The Empress Catherine and the Emperor Alexander laboured to give order, simplicity, and regularity to the administration, and to reduce it to a system, so that it might be as independent as possible of the caprices of the sovereign. Alexander, indeed, proclaimed in 1811 that the law was in Russia superior to the sovereign, and gave to the senate the right of remonstrating against any *ukase* (as an imperial decree is called) they thought contrary thereto. This, no doubt, seeing the way in which the senate is composed, is a very feeble check on the despotic power of the emperor. But it may well be doubted whether, in the actual state of Russia, the present form of government be not better adapted to its wants than any that could be substituted in its stead. It is sufficiently clear, as well from general principles as from what has actually occurred, that Russian princes cannot safely follow a course of conduct generally disliked by the nation. On the other hand, however, the extent and unity of the sovereign power is the best security for the progress of civilisation, and for the improvement and well-being of the mass of the people. The latter being, for the most part, without property, intelligence, or influence, would be tyrannised over to an incomparably greater extent than at present, had the nobles any share in the government, or were they able to control its proceedings. What Poland was Russia would be, did the nobility or superior classes participate in the sovereign power. But the interests of the autocrat and those of the mass of the people are generally identical. Under his protecting agis civilisation is extending, and a class of intelligent labourers is gradually growing up. The emperor is believed to be afraid of the nobles; but he has little

to fear from the people, the bulk of whom worship him like a demi-god. It is this which chiefly led to that immense social revolution, the emancipation of the serfs, accomplished 1862-65, which, more than anything, reduced the power of the nobles. There seems little doubt but that, under present circumstances, an enlightened despotism is the most suitable government for a country like Russia. A representative constitution would merely put additional power into the hands of a comparatively small class, and would be as little adapted to the wants of such a country as an absolute government would be to England.

The czar is the central point of the administration: his decisions are law. Every thing emanates from him in the first instance, and every thing is referred to him in the last. The labour he has to undergo is great, and requires incessant activity. The public business is transacted, under the emperor, by different boards, councils, or colleges, which have each separate, but sometimes not easily distinguished functions. The *Imperial Council of the Emperor* was established, on its present footing, in 1810. It consists of a president and an indefinite number of members, of which the ministers always make a part. It is divided into the five departments of legislation, war, civil and religious affairs, finance, and the affairs of Poland; and has the superintendence of all matters connected with the internal administration of the empire. The second college, or senate, was founded by Peter the Great in 1711, and is reckoned the most important body in the state. It has various functions, partly of a deliberative and partly of an executive character, set forth in a ukase of 20th Sept. 1802. It is the high court of justice for the empire, and controls all the inferior tribunals. The members are nominated by the emperor: at present their number is about 100, and each receives a salary of 7,000 roubles a year. The senate is divided into eight committees or sections, of which five sit at Petersburg and three at Moscow. Each committee is authorised to decide in the last resort upon certain descriptions of cases, brought either immediately before it, or by appeal from the inferior courts. In a few cases, however, parties dissatisfied with its decisions may petition the emperor. The senators are mostly persons of high rank, or who fill high stations; but a lawyer of eminence presides over each department, who represents the emperor, and without whose signature its decisions would have no force. In the *plenum*, or general meeting of the sections, the minister of justice takes the chair, as high procurator for his majesty. Besides its superintendence over the court of law, the senate examines into the state of the public revenue and expenditure, and has power to enquire into public abuses, to appoint to a great variety of offices, and to make remonstrances to the emperor. Monthly reports of its proceedings are published in the gazette. The third college consists of the *Holy Synod*, and to it is committed the superintendence of the religious affairs of the empire. It is composed of the principal dignitaries of the church. All its decisions run in the emperor's name, and have no force till approved by him. The fourth college consists of the *Committee of Ministers*, of whom there are eleven, viz. the ministers of the imperial household, of war, finance, justice, interior, public instruction, imperial domains, post-office, roads and public buildings, and the vice-chancellor and comptroller-general. The ministers have frequently colleagues who supply their place when they are either sick or absent. They communicate directly with the emperor, or with his *chancellerie*

particulière, in whose hands all the executive authority is centred.

The local administration differs in different provinces, government having always allowed conquered or annexed countries to preserve their own laws and institutions, except in so far as they were hostile to the general constitution of the empire. Finland has a special form of government; and the provs. wrested from Sweden by Peter the Great, Courland, and those formerly belonging to Poland, have peculiar institutions and privileges, which, however, have latterly been much modified. But despite these exceptions, the form of the provincial government is sufficiently uniform.

The empire is divided into general governments, or vice-royalties, governments, and districts. There are 14 of the first, 51 of the second, and above 320 of the last. There are also extensive districts which, from the thinness of the pop., or otherwise, are not organised into regular governments, which are called provinces, or *oblasts*. The viceroys, or general-governors, are the representatives of the emperor, and as such command the forces, and have the supreme control and direction of all affairs, whether civil or military. All the functionaries within their jurisdiction are subordinate to, and make their reports to them, and they even sanction or suspend the judgments of the courts. A civil governor, representing the general-governor, assisted by a council of regency, to which all measures must be submitted, is established in each government or province. In case of dissent, the opinion of the governor is provisionally adopted till the pleasure of the emperor with respect to the matter be ascertained. A vice-governor is appointed to fill the place of the civil-governor when the latter is absent or unwell. There are also, in every government, a council of finance under the presidency of the vice-governor, who manage the crown estates, and superintend the collection of the revenue; a college of general provision, which has the direction and inspection of all charitable foundations, prisons, workhouses, and schools for the instruction of the poor; and a college of medicine, which attends to all matters connected with the public health, appoints district physicians, and inspects pharmacopœias. The districts have each their local functionaries. The towns have a municipal body, elected once every three years by the different classes into which the free population is divided. Each town has also, according to its importance, a commandant or bailiff, appointed by the crown, who has charge of the police, of the public buildings and magazines, and who executes sentences, and pursues criminals.

The Russian judicial system is complicated, and not easily understood, except by natives. There are civil and criminal courts in every circle; and a supreme court of justice, divided into civil and criminal sections, is established in every government. Cases decided in the inferior courts may be carried by appeal to it. Its sentence is final in all criminal cases, and in all civil matters relating to sums under 500 roubles. Those involving property to a greater amount may be carried before the senate.

It is a curious fact that, notwithstanding the despotical nature of the government, all the provincial tribunals consist partly of elective functionaries. Thus, the superior court for a circle consists of a judge and secretary, and of two assessors chosen annually by the nobles, and two by the peasants; and the superior court of justice for a government, which is divided into a civil and a criminal chamber, consists of a president,

secretary, and four assessors for each chamber, two of the assessors being chosen by the nobility, and two by the burghers. It is, in fact, a principle in Russia, that a portion of the judges in every court should belong to the same class as the party whose interests are under discussion, and be elected for that purpose by his compeers. Previously to the reign of the Empress Catherine II., the judges, particularly in the inferior courts, were wretchedly paid. That princess increased their salaries, but they are still far too low: and seeing that the judges are removable at pleasure, and owe their situation to favour rather than merit, there is no wonder that the greatest abuses continue to exist in the administration of justice. The proceedings are dilatory in the extreme. The prohibition against taking fees from suitors is rarely complied with; and in most tribunals it is affirmed, that if justice cannot be altogether defeated, it may at least be indefinitely postponed, by dint of money. These abuses have, however, been, in part at least, obviated by the publication, between 1826 and 1833, by the legislative commission, of an extensive digest (*Svod Zakonov*, 'Body of Law') of all the laws then in force relative to the rights of citizens and the administration of public justice. This publication has greatly simplified the law, and is important from its being, as it were, a charter of rights which may be appealed to on all future occasions, and which it will be very difficult for any succeeding sovereign to abridge. But it would, notwithstanding, be idle to expect any very material improvement in the ordinary administration of justice, until the judges be better trained, selected, and paid; and till the influence of public opinion, and of a comparatively free press, neither of which has at present any existence in Russia, be brought to bear on the administration of justice, and of public affairs generally. The latter, in fact, is the only security against abuse on which any reliance can safely be placed. Wherever judges are exempted from the control of public opinion, and the animadversion of the press, they are most commonly the obsequious instruments of government, and seldom scruple to commit injustice when they believe it will be acceptable to their superiors.

There is in Russia, particularly in the great towns, a very efficient system of police. The officers are empowered to discharge various functions besides those which come more peculiarly within their province, such as the decision of differences between masters and servants. Crime is not frequent in Russia, and property is as well protected in it as in any other country. Houses being generally built of wood, fires in great towns are apt to be very destructive, and the most effectual precautions are taken to prevent their occurrence. All strangers arriving in Russia must produce their passports at the police office, and notify their arrival in the public papers.

Punishments.—Capital punishments are rare in Russia, treason being the only crime visited with death. In cases of murder, fire raising, and other capital offences, the criminal, after receiving a certain number of lashes from the knout (a heavy thong whip), under the infliction of which he sometimes expires, is condemned for life to forced labour in the mines of Siberia. The nostrils of criminals used also to be slit, and their face branded with a red-hot iron previously to their banishment to Siberia; but this needless aggravation of punishment was put an end to by the Emperor Alexander I.

Torture was formerly universal in Russia, and was inflicted at the discretion of the superior jus-

tices in all parts of the country, by whom, as was to be expected, the power was often shamefully abused. Russia is indebted to the Empress Catherine for the abolition of this atrocious practice. It is a singular fact, that the prejudice of the Russians, in regard to the necessity of torture, was so deeply rooted, that Catherine had to proceed with great caution in bringing about its abolition, which was effected rather by indirect than by direct means.

Division of the People into Classes.—The people of Russia are generally divided into four classes, viz. 1. nobles, 2. clergy, 3. burghers, merchants, and other farmers, and 4. the peasants, or agricultural labourers.

1. **Nobles.**—Previously to the reign of Peter the Great, the Russian nobility consisted principally of the descendants of the ancient petty princes of the country, or of lords possessed of vast estates. They were in the exclusive possession of all situations of trust and emolument, to which they succeeded according to their rank. Peter, who early saw the disadvantage of this state of things, and the necessity of undermining the influence of the nobles, most of whom were violently opposed to his projects for the regeneration of the country, had recourse to furtherance of his plans, to the scheme of creating a new order of nobility. In this view he divided all the civil and military functionaries in the service of the state into 14 classes, enacting, at the same time, that the 8 highest classes should confer on the individuals in them the distinction of hereditary nobility; that some of the other classes should confer the distinction of personal nobility, or of nobility for life; and that those enrolled in the others should be deemed gentlemen, or *bien nées*. Some modifications were made in this arrangement by the Empress Catherine II.; but it is still maintained nearly as it was contrived by Peter the Great.

According to the official accounts, the order of the nobility numbers about 700,000 individuals, of whom nearly 600,000 enjoy hereditary and the others personal dignities. In Russia, properly so called, the nobles are not numerous; but they abound in Podolia, Volhynia, and other provinces acquired from Poland, and especially in Poland itself. Few, however, of the Polish nobles possess estates, and many of them are in a very destitute condition. The titles of prince, count, and baron have superseded those formerly in use. In the government of Tula, there are said to be more than 100 families having the dignity of prince. All the members of noble families are noble, and have the same title as the head of the family. On the death of a noble person, his estate is divided, according to a fixed scale, among his children of both sexes. Nobles are exempted from all personal charges, and from the obligation to serve in the army. Nobles are also exempted from corporeal punishment; have leave to distil the spirits required for the consumption of their establishments; may engage in manufactures or trade; and have a right to all the minerals on their estates. Precedence is determined, in Russia, by military rank; and an ensign would take the *pas* of a nobleman not enrolled in the army, or not occupying some situation giving military rank.

The property of a noble who has been condemned is not confiscated by the state, but goes to his family. The nobles also elect various local magistrates and assessors, and deliberate at their meetings on various matters connected with the local administration. There is also in every government a committee of nobles to watch over the

interests of the body, and to take care of the establishments that belong to it; and every circle has a committee of nobles who manage the estates and affairs of nobles who are under age. These privileges, which are of considerable importance, were embodied and set forth in a ukase in 1762; and another ukase of the Emperor Alexander I. prohibits all government functionaries from interfering with the election of the assessors, and other functionaries chosen by the nobles.

It is not easy to form a fair estimate of the character of the Russian nobles. Generally speaking, their education is more superficial than solid; but many are, nevertheless, highly accomplished; they are all well acquainted with French, and numbers with the English and German languages; those who have travelled being distinguished by the superior polish and elegance of their manners. They are universally hospitable; and most of them affect, and many relish the society of literary men and artists. That they are more sensual, more given to ostentatious display, and less distinguished by a gentlemanly bearing towards their inferiors, than the higher classes in England or France, is, no doubt, true. However, considering that the Russian nobility have no exciting political occupation, that in most parts of the empire there is no middle class, and that the occupiers of their estates are not free men but slaves, the wonder is, not that their tastes and habits should be, in some respects, barbarous, but that they should have made so great an advance as they have done since the reign of Peter the Great, and that they should be so intelligent and refined as they are found to be.

The Russian nobles, like those of England and other countries in feudal times, are in the habit of keeping great numbers of servants. They receive only a trifling pittance as wages, but quite enough for their wants, as they are fed and clothed by their masters. Many Russian noblemen have recently distinguished themselves by their attention to their estates, and by the efforts they have made to introduce the improved processes and implements in use in more advanced countries. In some instances they have brought land stewards and labourers from England. Latterly, also, many of the principal nobles have become extensive manufacturers, and some of the greatest manufacturing establishments of the empire are, at present, in their hands. Some manufactures conducted in this way have been eminently successful; though it is hardly necessary to add, that if they are of the higher class, or require peculiar skill, economy, or attention, they are not of a kind that can be successfully carried on by noblemen; and that the moment the protection afforded by oppressive custom-house duties, under which they have grown up, is withdrawn, they will straightway fall to the ground.

Mr. Coxe and Dr. Pinkerton, among the best and most trustworthy of the English travellers who have visited Russia, speak very favourably of the Russian nobility. The former says, that though they have adopted the delicacies of French cookery, they neither affect to despise their native dishes, nor squeamishly reject the solid joints which characterise an English repast. The plainest as well as the choicest viands are collected from the most distant quarters. At the tables of opulent persons in Petersburg may be seen sterlet from the Wolga, veal from Archangel, mutton from Astrakhan, beef from the Ukraine, and pheasants from Hungary and Bohemia. The common wines are claret, Burgundy, and champagne; and English beer and porter may be had in perfection and abundance. It is usual to take a whet before

dinner; but the stories engrafted upon this practice, of the prevalence of inebriety among the higher classes, are wholly without foundation. In this respect their habits have undergone a total change since the days of Peter the Great, and they are now remarkable for sobriety. The peasantry, however, often indulge to excess in their potations. (Coxe, ii. 151.)

The lengthened stay of the Russian armies in the western and more civilised European states, after the defeat of Napoleon's invasion, made a large number of the nobles, and of the more intelligent classes (which in Russia consist of the military officers), familiarly acquainted with a more advanced state of society, and a better form of civil polity. This circumstance, also, gave an increased stimulus to the desire for travelling that previously prevailed among the nobility, many of whom withdrew to France, England, and Italy. It is not to be denied, that the influence of these concurring circumstances has since, on various occasions, made itself sensibly felt in Russia; and that the government has sometimes had reason to believe that a considerable portion of the nobility, and even some of the most distinguished regiments, would not be displeased to see some limits set to the powers of the czar. To counteract this feeling, various obstacles have latterly been opposed to the emigration of Russian nobles and to their residence abroad: the most vigilant measures have also been adopted to hinder the employment of foreign tutors and governesses; and to prevent the introduction of foreign works not approved by the censor. It remains to be seen whether these measures will be effectual to maintain the present order of things; but, at all events, it is sufficiently clear, from what has been already seen, that, under existing circumstances, such a revolution in Russia as should materially modify the power of the czar, would not be for the advantage of the bulk of the people.

2. *Clergy.*—This body will be more fully noticed under the head Religion. It comprises, in all, about 274,000 individuals, of whom about 254,000 belong to the Established Church. Including the wives of the priests, it is supposed that about 540,000 persons may belong to this class. They are exempted from all direct taxes, and from corporeal punishment, and may acquire all sorts of fixed property.

3. *Merchants and Burghers.*—This comprises the class intermediate between nobles and peasants, and is thus alluded to by the Empress Catherine in her instructions for a new code of laws:—'This class, composed of freemen, belongs neither to the class of nobles nor to that of peasants. All those who, being neither gentlemen nor peasants, follow the arts and sciences, navigation, commerce, or exercise trades, are to be ranked in this class. In it should be placed all those who, born of plebeian parents, shall have been brought up in schools or places of education, religious or otherwise, founded by us or by our predecessors: also the children of officers and of the secretaries to the chancery,' &c. Merchants and traders belong to this class; and they, as already stated, are distributed into guilds according to the amount of capital they respectively possess, and enjoy various privileges on their paying a certain per-centage on their declared capital. The Burghers, or second division of this class, possess many privileges superior to the peasants; but they are distinguished from the merchants by being subject to the capitation tax and to enrolment in the army and navy. The Germans and other free colonists established in different parts of the empire, and the free cultivators and tenants found in certain districts

belong to this intermediate class. It comprises about three millions of individuals.

4. *Peasants*.—Previous to the year 1863, by far the largest portion of the people of Russia were slaves belonging either to the crown or to individuals, above 21,000,000 being the property of the former, and 23,000,000 of the latter. The slaves belonging to the nobility were very unequally distributed, some great proprietors having a very large number, while the smaller and most numerous class of proprietors have comparatively few. As already stated, by an imperial decree of March 3, 1861, coming into final execution on March 3, 1863, serfdom was abolished, under certain conditions, within the whole of Russia. The owners of the serfs were compensated for their loss by a payment regulated in the following manner. The previous labour of the serf was estimated at a yearly rental of 6 per cent., so that for every 6 roubles which the labourer earned annually, he had to pay 100 roubles to his master as his capital value to obtain his freedom. Of this sum, the serfs had to give immediately 20 per cent., while the remaining 80 per cent. were disbursed as an advance by the government to the owners, to be repaid, at intervals extending over 49 years, by the freed peasants. According to an official report made on March 3, 1863, the necessary contract arrangements—varying greatly in the different governments, and left, in many instances, to the serfs and owners themselves—were concluded, at that period, in 78,850 cases respecting 10,158,000 serfs. Of these, 46,298 cases had already come into operation. In about half of these cases, concerning 2,438,000 souls, the documents had not been signed by the peasants; 25,236 acts of emancipation, respecting 2,038,000 peasants, stipulated for a yearly payment to the landholder; 16,721, concerning 1,785,000 souls, stipulated for work to be rendered instead; and in 4,341 cases a complete emancipation had been arranged for, by which 583,000 peasants became entirely free. In 924 cases the government cooperated in the emancipatory arrangements; in 163 cases at the desire of the landholders alone, which can only be effected when they are contented with the four-fifths of the emancipation price paid by the state, and renounce the other fifth, which should be paid by the peasants. The government had, on the whole, effected the redemption of 106,497 peasants, which required a sum of 11,457,000 roubles, of which, however, scarcely the half was paid in state paper, and the other portion was retained as a debt due to the landholder by the state. The law on the subject enacted that the emancipation must be effected by the state whenever a noble possesses no more than 20 serfs. According to an official report of Sept. 10, 1865, the whole of these arrangements were completed in July previous, so that, from this date, serfdom ceased to exist in Russia.

The Russian peasants are of a sound constitution, stout and firmly built, and generally of a middle stature. They live in wooden cottages, formed of whole trees piled upon each other, and built together in villages, the gables to the road. Sometimes they consist of two stories, but more frequently only of one. They are heated by stoves, and, though dirty, are not uncomfortable, nor ill suited to the climate. Their furniture consists generally of wooden articles, with a pan or two. Beds are little used, the family generally sleeping on the ground, on benches, or on the stove. The dress of the peasant consists of a long coarse druggot coat, fastened by a belt round the waist, but in winter they wear a sheep-skin with the woolly side inwards. Their trousers are of coarse linen; instead of stockings, woollen or flannel cloth is

wrapped round the legs, and boots or shoes of matted linden bark are frequently substituted for those of leather. The neck, even in winter, is bare, and the head is covered by a peaked round hat or cap.

The Russian peasant considers himself well fed if he have rye-bread, which is the staple article of food throughout the empire, and sour cabbage soup, with a lump of fat, or hog's-lard, boiled in it, by way of relish. He uses butchers' meat on holidays, and at other times eggs, salt-fish, bacon, lard, and mushrooms, which, at the proper season, are extremely abundant. His favourite dish is a hodge-podge of salt or fresh meat, groats, and rye-flour, highly seasoned with onions and garlic. Salted cucumbers are a constant dish at the peasant's table all the year round. These and salted cabbages form an important article of national commerce. They are brought in large vats from the southern provinces, where the climate favours their production, to Moscow, Petersburg, and other large towns, where they are constantly on sale in the public markets. The preparation, in autumn, of a sufficient supply of these pickled vegetables forms, in every family, an important part of domestic economy. This dependence of the Russian peasant on vegetable diet is, no doubt, a consequence of the extraordinary number of fasts and fast-days, of which he is a careful observer, and which are multiplied to such an absurd extreme, that it is said there are only from 60 or 70 days in the year on which it is permitted to use butchers' meat. *Quass*, a fermented liquor, made by pouring boiling water on rye or barley-meal, is the common beverage of the peasant. But he is also very fond of mead, and still more so of corn brandy, and other spirituous liquors. The consumption of the latter is immense, exceeding 100,000,000 gallons a year, and furnishing annually a large revenue to government. The use of tea is becoming more and more extended. A substitute for it, called *izhitzen*, consisting of herbs and honey boiled together, is also extensively used by the peasantry.

The peasants are exceedingly superstitious. A vessel of holy water hangs from the ceiling of every room, and a lamp lighted on particular occasions. Every house is provided with a sacred corner, supplied with one or more pictures of their tutelary saints, coarsely daubed on wood, frequently resembling rather a Calmuck idol than a human head; but sometimes they are of a better quality, and neatly framed: to these they pay the highest marks of veneration. All the members of the family, the moment they rise in the morning, and before they retire to sleep in the evening, never omit their adoration to the saints: they cross themselves during several minutes, upon the sides and forehead, bow very low, and sometimes even prostrate themselves on the ground. Every person also, on entering the room, pays his obeisance to these objects of worship previously to his addressing himself to the family. The Russian peasantry have the vices incident to their situation. With great capacity of endurance, and the most extraordinary talent for imitation, they have little active vigour or steadiness of purpose. In accosting a person of consequence, or from whom they expect any favour or advantage, they prostrate themselves, touch the ground with their hands, and kiss the fringe of his garments. When they accumulate money, they most frequently bury it in the ground, a practice common to all countries where property is insecure.

Previously to the reign of Peter the Great, it was customary for the Russians, of all ranks, to marry their children very early, even before the

age of puberty. Though restrained by Peter and Catherine II., this custom of early marriage still prevails, and is said to be fraught with many pernicious consequences. A ukase, issued in 1801, prohibits priests from solemnising marriages, unless the man be 18, and the woman 16 years old. But the rule which exempts all peasants having 3 children from the conscription is in direct opposition to the ukase now referred to, and gives a powerful stimulus to the habit of early marriage.

The use of the vapour bath is universal in Russia, not being reckoned a luxury, but a necessary: and public baths are met with in all parts of the country. They are resorted to by the peasantry, at least once a week. Though the baths are highly heated, the bathers not unfrequently run out, and in summer plunge into cold water, or, if it be winter, roll themselves in the snow. This sudden alternation of temperature is not found to be injurious to health. But, notwithstanding the frequent use of the bath, the people are very deficient in cleanliness.

Army.—The military power of Russia has been greatly exaggerated by some, and as greatly depreciated by others. The Strelitzes, the first regularly organised corps of infantry in the Russian service, seem to have had their origin about the middle of the 16th century; and continued, till their suppression by Peter the Great, to constitute the principal strength of the army. They enjoyed various privileges; were always about the person of the emperor; and by their licentiousness and insubordination, as well as bravery, bore a close resemblance to the Praetorian bands of antiquity, and the Janissaries of the Ottoman Porte. The abolition of this formidable corps, and the reconstruction of the army on a plan similar to that followed in the more civilised countries of Europe, was undoubtedly one of the greatest services rendered by Peter the Great. At his death, the regular army amounted to about 110,000, exclusive of the imperial guard; and the success which attended his contest with the Swedes showed that this army was a match for the best troops that could then be opposed to it.

Under Catherine II., the army was greatly augmented and improved. This able and ambitious princess augmented the pay of the troops and officers, and gave them a more commodious and elegant uniform than that formerly in use. She formed the Cossacks into a light cavalry, which, after being successfully opposed to the Spahis of the Turks, has since distinguished itself in the great contests of more modern times. During the latter part of the reign of Catherine the regular army amounted to about 250,000 men; and little was wanting to place it on a level with that of the surrounding powers, save the better organisation of the commissariat department, and the choice of better educated and more skilful native officers. It is, however, to the Emperors Alexander I. and Nicholas, but more especially the latter, that the Russian army is indebted for the more efficient organisation, discipline, and power by which it is now distinguished. The momentous struggles in which the former was engaged called forth all the military resources of the empire; many abuses were rectified, and improvements introduced: and the armies of Alexander were at length enabled to contend successfully with those of the greatest captain of the age. Under the present emperor, the discipline and organisation of the army have been still further improved; and it is, at present, in a comparatively high state of efficiency.

The Russian army was newly organised, by a ukase of the 9th August, 1835. Down to that

period, two large armies were maintained; but these were then consolidated, and the staff of one of them reduced. The army is now divided into six *corps d'armée* of infantry, each corps into three divisions, each division into two brigades, each brigade into two regiments, and each regiment into ■ battalions of 1,000 men each; four battalions take the field, and two remain as a reserve; so that each regiment is 4,000 strong, and each *corps d'armée* 48,000 strong. To each of these six corps there is attached one division of light horse, in two brigades (Hussars and Lancers) of two regiments each. Each regiment of horse consists of nine squadrons of 160 horses each, eight of which take the field, and one remains as a reserve; so that a regiment in the field has 1,280, and a division 5,120 horses. Besides this, each corps has a division of artillery united to it, consisting of three brigades, with four batteries each of eight guns, and one brigade of horse artillery, one reserved battery, one park of artillery, and three sapper battalions, together 6,000 men. Thus a complete *corps d'armée* is 60,000 men strong, with 120 pieces of artillery; and the whole active army 360,000 men, and 720 pieces of artillery. Next come the guards, in three divisions of infantry, three divisions of cavalry, and one division of artillery, with 120 guns; and then the grenadier corps, equal in strength to an infantry corps; making together 114,000 men, and 240 guns. There is thus a force of 474,000 men and 960 pieces of artillery.* In addition to this powerful army, the reserves, somewhat on the plan of the Prussian landwehr, comprise two levies, a 1st, of about 100,000, and a 2nd of about 115,000 men. On the whole, therefore, it is probable that the strength of the regular disposable Russian army, as given in the official returns, is from 660,000 to 700,000 men. But its real as well as its apparent magnitude, its organisation, and distribution, are perpetually changing. In addition to the above, there is a large force of regular troops appropriated to local or peculiar services, including the garrisons of the different fortresses with the armies employed in the Caucasus, Finland, and Poland. If to these we add the veterans, with the Cossacks and other irregular levies, the total amount will be swelled to considerably more than a million of men.

It may thence, perhaps, be supposed, that Russia is in a position to bring a force of 500,000 or 600,000 men into the field, exclusive of irregular troops. But, vast as are her means, this would be a very exaggerated estimate. Supposing the regular disposable army on foot, including the reserves, to amount to 660,000 men, two out of every six battalions (1-3rd part of its amount) of which it is made up are almost always absent, being employed in the training of new levies, and in public works. Hence, if this statement be nearly correct, only 420,000 of the 660,000 disposable troops on foot would be directly available in a campaign. And even this would be far too high an estimate. A large deduction must be made in the event of their being called out, from the numerical strength of the reserves. It is also well known that the forces actually embodied rarely come up to those borne on the official returns: and though this abuse be much less frequent now than formerly, still it is by no means uncommon, especially in the remoter governments. Owing, also, to the disaffection prevalent in Poland, and her lengthened frontier, stretching in a continuous line from the Gulf of Bothnia to the southern shores of the Black Sea, Russia must keep, especially when engaged in war with powers having the command of the sea, a very large

army to protect her own territory. Even if the troops really at the disposal of government corresponded with those in the official returns, Russia would find great difficulty in sending large armies into foreign countries, and maintaining them when there. Her finances are far from being in a flourishing state; her fleets, if they be not destroyed, will most probably be cooped up in harbours; and owing to the want of an effective organisation, and the abuses that prevail in her commissariat department, a great expenditure is incurred at the same time that the troops are often very ill provided with the most indispensable necessities. The medical department is, also, far from efficient.

At home Russia is all but invulnerable. The severity of the climate renders it next to impossible for an invading army to maintain any permanent footing in the country; whilst the nature of the ground, without roads, and intersected by forests, rivers, and marshes, opposes the greatest obstacles to the advance of an invading force, and still more to its retreat. Even though the army of Napoleon I. had not had to contend with the rigours of an unusually early winter, the result of his expedition would not have been materially different. He could not possibly have maintained himself during the winter in Moscow. Sooner or later he must have retreated; and a retreat through such a country, and in the presence of a powerful enemy, ready to take every opportunity of attacking, could not fail to be most disastrous.

The troops of the Imperial Guard are a very fine body of men. Generally the Russian soldiers are, in respect of bodily vigour, inferior, perhaps, to those of England. They have no enthusiasm; and, in respect of activity and intelligence, are very far below those of England, France, and Prussia. On the other hand, however, they possess in the greatest perfection the two first qualities of a soldier, the most unflinching courage, and the most implicit obedience. Subjected from birth to a master whose will is their law, the habit of prompt and absolute obedience becomes, as it were, a part of themselves. Regardless of dangers or difficulties, they will attempt whatever they are ordered; and will accomplish all that the most undaunted resolution and perseverance can effect. They also endure, without a murmur, the greatest hardships and privations, and support themselves in situations where others would starve. The Cossacks, Bashkirs, and other irregular cavalry, are very useful troops, and are well calculated either to improve a victory or to cover a retreat. Contrary to what might have been expected, the artillery is the department in which the Russians have made the greatest advances; but it is said to be in excess as compared with the other descriptions of force. The cavalry, also, is well mounted and comparatively excellent. Were the officers as intelligent and skilful as the soldiers are brave and docile, the Russian army would be most formidable. But this is far from being the case. Latterly, however, great efforts have been made to improve the education of the officers, and exclusive of the establishments for that purpose mentioned below, a military academy was opened at Petersburg, in 1832, where officers not above the degree of captain are instructed in military service; and, in 1837, a school for 400 cadets for the artillery and engineers was opened at Woronesh. The pay of the officers, though still miserably low, has been increased; and the late emperor endeavoured to excite the martial spirit of the people, and to make the service popular, by instituting grand military spectacles. Some of these have been on a gigantic scale. At the grand

military and religious festival in commemoration of the battle of Borodino, in 1839, no fewer than 120,000 troops were present. Marshal Marmont spoke in high terms of the efficiency and discipline of the Russian forces he reviewed in the S. provs. in 1834.

Recruiting.—The army is recruited from the classes of peasants and artisans, partly and principally by means of a conscription, partly by the adoption of the sons of soldiers, and partly by voluntary enlistment. Every individual belonging to the classes now named is, with few exceptions, liable to compulsory service, provided he be of the proper age and stature. The levies are ordinarily in the proportion of 1 or 2 to every 500 males; but during war the proportion is at least as 2 or 3 to 500, and sometimes as much as 4 or even 5 to 500. This last, however, may be taken as the *maximum* levy, and is rarely exceeded. The number of recruits to be furnished by the empire in general, and by each district in particular, is fixed according to the results of the preceding census. The nobles nominate such of their dependents as they please to complete their quotas, the only conditions being that they should have a good constitution, and be of the requisite size, and not less than 18 nor more than 40 years of age; and, as idle, ill-disposed individuals are sure to be nominated in preference for recruits, those who are averse from the service endeavour to distinguish themselves by industry and good conduct. The *minimum* standard height for infantry is not less than 1 metre 594 millimètres; and for cavalry, 1 metre 660 millimètres. The recruits are first sent to the recruiting establishments, and thence forwarded to the corps to which they are assigned. Nobles, magistrates, clergymen, and students are exempted from the service. Merchants and traders enrolled in the different guilds are also exempted; as are the only sons of peasants, and peasants with more than 3 children. The levies furnished by the Cossacks are regulated by particular treaties; and many half savage tribes are excused, partly on account of their diminutive size, and partly because of their great aversion to a military life. Generally, it is found that a levy of 2 on every 500 males produces a supply of about 90,000 to 100,000 men. Substitutes are admitted in the event of the noble being informed and not objecting to their employment.

The period of service is fixed at 22 years for the guard, and 25 years for the other troops. Latterly however, or since 1833 and 1840, soldiers after 10 or 15 years' service, according as they belonged to the Western or Eastern divisions of the empire, are *entitled to an indefinite leave*; and are sent home to their native place, their names being enrolled in the reserve of the battalion or squadron of the regiment to which they belong, that they may, if necessary, be again called into active service. The aggregate strength of the reserves (those of 10 years' service being called the 1st reserve, and those of 15 years' service the 2nd) is estimated at about 215,000 men. The guard is recruited from the grenadiers; the latter from the infantry of the line and light chasseurs.

Contrary to what might, perhaps, be supposed, the military is not a popular profession in Russia, and, speaking generally, the conscription is held in abhorrence. Formerly the levying of conscripts used to be accompanied with violence and bloodshed. And though the condition of the soldier has latterly been much improved, and his period of servitude shortened, the severe edicts that occasionally appear against desertors, and the punishments inflicted on those by whom conscripts are harboured or concealed, evince the strong dislike

entertained by the peasantry to the service. It is believed that nothing would do so much to lessen this dislike as the restriction of the period of compulsory service to some 10 or 12 years, and abolishing the system of reserves. As the habits of a soldier would be fully formed in that period, the fair presumption is that but few comparatively would leave at the end of the term; at the same time that their being aware that they would then be perfectly free, would render conscripts less indisposed to enter the army.

Russian soldiers are very generally married; government, contrary to the policy of most other states, giving every facility to those who wish to take wives. Among other inducements, it supplies them with lodgings, and undertakes to feed, clothe, and educate their children. But it allows the males no choice of a profession; the latter being all brought up from infancy with a view to their being made soldiers or otherwise engaged in the public service. After remaining for a while with their parents in their quarters, they are taken to depôts or establishments at Woronesch and other places, where they are instructed in their duties. This class has received the name of *cantonists*, and is supposed to amount to not less than 270,000 individuals. Many of the non-commissioned officers of regiments belong to the class of *cantonists*, having been selected on the ground of their superior merit.

There are at Petersburg schools for pages, engineers, officers of artillery, and sub-officers of the guard; the rank of ensign being given to pages who have gone through a certain course, and to gentlemen cadets who have been two years in the service. But the principal establishment for the education of officers is that of the *Corps des Cadets* at Petersburg, founded in 1731. It has about 700 pupils, the sons of noble parents, that is, of those who have attained to the rank of captain in the civil or military service. The pupils are divided into five classes, and on leaving school become ensigns in regiments of the line. This school has materially contributed to diffuse information among the inferior nobility, and to supply the army with able officers. There are also schools for cadets at Moscow, Woronesch, Polotsk, Tula, Tamboff, and other towns. The pupils leave after a fixed time, and are ranked as ensigns.

During peace promotion depends upon seniority, from the rank of ensign to that of colonel: during war it is determined indifferently, by gallantry, selection, and seniority. After two years' service a soldier may become a *sub-officer*. The *sub-officer* who has served twelve years obtains of right the rank of *sub-lieutenant* or ensign.

The Russian army is supported at very little expense. Exclusive of their pay, the higher class of officers receive considerable allowances as mess-money, and they generally contrive to eke out their emoluments in various indirect ways. The pay of the subalterns is most inadequate; and it is hardly possible for any one to serve as a subaltern in the cavalry, especially in the cavalry of the guard, unless he has private resources. Officers are allowed, according to their rank, one or more servants (*deutchiks*), maintained by government, but equipped at the expense of their masters. They are taken from among the recruits, the least suitable for active service. The pay of a common Russian soldier does not exceed 35s. a year, and various deductions are made even from this miserable pittance. He gets a new uniform each year; and is allowed, in addition, 3 barrels of flour, 24 lbs. of salt, and a certain quantity of rye or oatmeal. On fête days the soldiers of the guard receive a certain allowance of butchers' meat, but

this is very rarely tasted by their fellows. At home the soldier used to be paid in paper; but when he crossed the frontier he was paid in silver roubles; and one of the latter being equivalent to $3\frac{1}{2}$ of the former, his pay, when abroad, was, of course, augmented in the same proportion. This may, perhaps, have been partly intended as a stimulus to the soldier to undertake offensive operations; but, besides having this effect, it was absolutely necessary to enable him to subsist among foreigners without robbing. The cavalry horses are very good; and, fodder being very cheap, they are well kept. Soldiers leaving the army on the expiration of their compulsory service are entitled to a small pension; and those who have been maimed or wounded are received and supported in some of the hospitals established in that view in different parts of the country. Soldiers who continue in the army after their term of compulsory service has expired, acquire several advantages. They receive, exclusive of the retiring pension to which they are entitled, double pay; and after five years' voluntary service they are entitled to a retiring pension equal to three times their original full pay.

The inadequate pay of the officers and men is the grand evil in relation to the Russian army. It compels all classes to attempt underhand methods of making money, and hence the jobbing and corruption of the first and the thievish habits of the latter. These practices are now, however, less prevalent than formerly. Down to a late period the colonels of Russian regiments supplied their corps with most articles of provision and clothing, and it is needless to add that in very many instances the officers were more anxious to increase their own emoluments than to provide for the wants and comforts of the troops. But this system has been suppressed; and the provisioning and clothing of the troops is now placed under the superintendence of boards, constituted for the purpose. But despite every precaution there is still much temptation, and many opportunities to indulge in peculation.

Capital punishments are at all times rare in the Russian army, and are never inflicted except during war. During peace culprits are uniformly condemned to transportation to Siberia, and to forced labour in the mines. Corporal punishments may be ordered by the commanding officers of regiments, but they cannot be carried beyond twenty strokes of the knout, and are not inflicted except for very grave offences. Soldiers who continue in the army after their full period of compulsory service is exhausted cannot be corporally punished except by command of a council of war.

Military Colonies.—Exclusive of her ordinary forces, Russia has a force of military colonists. These are a sort of agricultural soldiers established by an ukase issued in 1818, agreeably to the suggestion of General Araktchiev. The object was to create a military force at the least possible expense, by engrafting military service upon the agricultural labours of the peasants. For this purpose certain districts belonging to the crown were selected in the environs of the lake Ilmen, in the government of Novgorod, and in some of the southern governments, the territory of which was distributed among the peasantry, at the rate of about 15 *deciatines*, or 45 acres of arable land to each head of a family, villages on an improved and uniform plan being at the same time erected for their accommodation. The stock and implements necessary for the cultivation of this land were furnished to the colonist by the crown, and he was charged with its cultivation, with contri-

buting to the common magazine of the village, and keeping up the roads, the surplus produce after these outgoings and the provision for his family were deducted, being at his disposal. A soldier was assigned to each colonist, to be maintained by the latter; but the soldier was, in return, obliged, when not absent or engaged in duty, to assist the colonist in the labours of his farm. The colonists, as well as the soldiery, were deprived of their beards, and wore uniform, every thing within the colony being subject to military regulation: there was no restraint on the marriage of the soldiers; and their male children, and those of the colonists, were all bred up to be soldiers. The girls were educated in separate schools; and, though there was no regulation to that effect, were generally married to the young men belonging to the colonies. Exclusive of the principal soldiers already alluded to, there was in every cottage a substitute or supplementary soldier, generally a son of the colonist, who was bound to take the place of the principal soldier in the event of his death or sickness, so that the regiments distributed among the colonies should never want their full complement of men.

The colonies contained in all from 50,000 to 60,000 troops, but they are now generally admitted to have been a failure. It will always, indeed, be found to be impossible successfully to combine the business of agriculture with the military service. The soldiers get attached to their farms and families, and become unwilling to leave them and impatient of military restraint. Hence considerable discontent prevailed, at different times, among the colonies in question. A dangerous mutiny, in which several officers lost their lives, was not suppressed except by the presence of the late emperor, who discovered on this occasion his usual courage and decision. The military colonies are now confined to cantonments in which peasants occupying a certain extent of land are charged with the maintenance of a trooper and his horse.

Navy.—Russia is indebted for her naval power, as she is for her ascendancy by land, her civilisation, and, indeed, everything else, to the creative genius of Peter the Great. Previously to his accession, Russia had no sea-port, other than Archangel, and did not possess a single gun-boat. As soon, however, as Peter had acquired a footing on the Baltic, he set about creating a navy; and the better to qualify himself for the task of its construction, he visited Holland and England, where he not only made himself acquainted with the principles of naval architecture, but with the practical business of a ship's carpenter, by working himself at this employment. The monarchs since Peter, and especially Catherine II. and the present emperor, have exerted themselves to increase and improve the fleet; and, it is now, perhaps, in as high a state of efficiency as it is likely to attain.

The Russian navy consists of two great divisions, the fleet of the Baltic, and that of the Black Sea. Each of these two fleets is again subdivided into sections, of which three are in or near the Baltic, and three in or near the Black Sea, to which must be added the small squadrons of galleys, gun-boats, and similar vessels. The divisions, like the English, carry the white, blue, and red flag—an arrangement originating with the Dutch—but without the rank of the admirals being in any way connected with the colour of the flag. Each division of the fleet formerly consisted of one three-decker, eight two-deckers, six frigates, one corvette, and four smaller vessels.

The sailors of the imperial navy are levied, like

the army, by recruitment; as many of them, however, as possible are enlisted voluntarily, and the crews furnished by Finland are obtained altogether in this manner. The period of service in the navy was formerly twenty-two years, but was reduced, by imperial decree of September 10, 1859, to fourteen years.

An official report published by the minister of marine, July 20, 1863, gives the following statement of the existing naval forces of Russia. It is said that this list includes only those vessels which are seaworthy and fit for active service.

The Russian fleet, according to this report, comprises six divisions, as follows: 1. The Baltic fleet; 2. The Black Sea fleet; 3. The naval force stationed in the Amour; 4. The fleet in the White Sea; 5. The fleet in the Caspian Sea; 6. The naval force on the Lake of Aral. This last force is the smallest of all, and consists of but two steamers of 40 and 12 horse-power; the fleet in the White Sea is more powerful, and includes two war steamers carrying 8 guns each and fitted with engines of 240 and 15 horse-power respectively, besides three smaller steamers. The next most important fleet is that in the Caspian, comprising ten steamers of 850 horse-power, and ten steam transports, four of which latter are armed with 8 guns, and the other six with 6 guns each. The naval force in the Amour river is composed of six corvettes, mounting 11 guns each; seven schooners, six of 6 guns each, the other carrying 4 guns; and eleven steam transports, three of them screws, and carrying collectively 37 guns. The fleet of the Black Sea is composed of forty-two war steamers, six of which carry 11 guns each; three, 9 guns each; and the remainder 2 or 4 guns. The Baltic fleet includes nine ships of the line, of 135, 131, 111, 84, three of 83, 78, and 68 guns; fourteen frigates, one of which mounts 70 guns, and four others carrying from 45 to 60 guns; six corvettes, armed with 11 to 17 guns each; two gun-boats, of 3 guns each; nine steamers of various sizes, carrying together 68 guns; nineteen smaller steamers and five transports; making a total of sixty-four sail. The greater number of these vessels were built in England, and fitted with English engines, between the years 1851 and 1861. But the list does not include the iron-clad frigates built in 1863—one, the 'Sevastopol,' at Cronstadt, and the other in England.

Russian ships, both in the Baltic and Black Sea, last but a very short time, and, consequently, are very expensive. The great naval stations are Cronstadt and Sveaborg, in the Gulf of Finland, and Sevastopol, in the Black Sea.

Education.—Education in Russia is at a very low ebb. There have for more than a century been schools in all the great towns; but these are but few in number, and the rural population is too much dispersed, and tied down to routine practices, to allow it to reap much benefit from country schools. But, notwithstanding the difficulties in its way, education has been a good deal improved and extended within the present century. It has always been, and continues to be, an object of great solicitude with the government. A plan for a national system of instruction was laid down in a ukase of the emperor Alexander I. issued in 1802, which, though it has undergone various modifications, contains the outline of the system that is still followed. The empire is divided in respect of education into a certain number of districts, each of which has, or is intended to have, a university, with a certain number of lyceums (at which the young men intended to fill civil offices are mostly in-

structed), *gymnasiums*, high schools, and elementary schools, varying according to its extent and population. At present the districts are those of Petersburg, Moscow, Kharkof, Kasan, Dorpat, Kieff, Odessa, Wilna, Warsaw, and Siberia; but of these only the first six have universities. A curator, or inspector, is placed at the head of each district, who is in constant communication with the minister of public instruction. The subjects and courses of study, the examinations to be gone through, and the fees to be paid, are all fixed by government. The sum placed annually at the disposal of the minister of public instruction amounts to above 3 million roubles.

The higher educational establishments of the empire are:—

1. University of Petersburg.—This university, founded in 1819, has about 70 professors and subordinate functionaries, and 400 students. The eight governments dependent upon it had 15 *gymnasiums*, 64 district schools, and 96 parish schools, with 215 private institutions.

2. University of Moscow.—This university, founded in 1775, has 126 professors or functionaries, and about 900 pupils. In its library are 100,000 vols. It has nine governments within its jurisdiction, and in these a lyceum, 12 *gymnasiums*, 84 district schools, and 226 parish schools. The surveillance of the system is committed to the care of an inspector and five sub-inspectors. A school has also been founded in Moscow for the gratuitous education of the sons of fifty decayed merchants.

3. The University of Kharkof, founded in 1803, has 79 professors, and 448 pupils. The 5 governments with the territory of the Don Cossacks under its jurisdiction has 7 *gymnasiums*, 61 district schools, and 117 parish schools.

4. The University of Kasan, founded in 1804, has 87 professors, and 321 pupils. The 10 governments under its jurisdiction have each a *gymnasium*. The Arabic, Persian, Turkish, and Mongolian languages are taught in this university.

5. The University of Dorpat, founded in 1632, one of the most celebrated in Russia, has about 75 professors, and 600 pupils. There is attached to the institution a botanical garden and a museum. The three governments under its jurisdiction have four *gymnasiums*, and 111 public schools.

6. The University of Kieff, called St. Wladimir, was founded in 1834, being intended to supply the place of that of Wilna, suppressed after the late Polish insurrection. It has 87 professors and subordinate functionaries, and 522 pupils. It is well endowed. There are 5 governments under the jurisdiction of this university, in which are 1 lyceum, 11 *gymnasiums*, 41 district schools, 107 parish schools, and 24 private establishments. Government provides for the education of 50 pupils at this university, of whom 26 are trained to be teachers, and 24 are instructed in the law, so as to enable them to fill judicial and other civil offices in the old Polish provinces.

In addition to the above there are the educational districts of Odessa, Wilna, and Warsaw, which have all institutions of greater or less importance. The lyceum at Odessa, and the institution of nobles at Warsaw, enjoy a well-merited reputation.

Besides the above there are various schools founded for particular objects, and not coming directly under the control of the minister of public instruction. Among others may be specified the military schools in Petersburg, Moscow, and other towns; schools of the surgico-medical academies of Petersburg and Moscow; schools founded

and endowed by individuals, and those founded by and placed under the control of the clergy.

The latter, or the theological schools, intended principally for the instruction of the sons of the clergy, are amongst the most ancient and important of any in Russia. They consist of four principal academies at Kieff, Moscow, Petersburg and Kasan, which give instruction in the higher branches, and confer the degrees of A.M. and M.D.; of 36 diocesan schools; and of between 350 and 400 district schools, at which considerable numbers of the inferior classes are instructed; and of a still greater number of parish schools. The total number of scholars in these four descriptions of schools may vary from 75,000 to 85,000. Though the sons of the clergy generally follow the profession of their fathers, this is not always the case. Occasionally they enter the civil service, and some of the most celebrated statesmen, historians, and poets, of Russia, have sprung from this class.

Elementary instruction is in the most depressed state. According to a ukase of 1802, a grammar school should be established in every district, and an elementary school should be established in every parish, or at least in every two parishes, according to the population. But these regulations have, in very many instances, not been complied with; and when it is considered that the advantages of education are but little appreciated by the peasantry, and that it is frequently discouraged by the nobility, it will not appear surprising that such should be the case. In despite, however, of every obstacle, education has made and is making a considerable progress. The official report of the minister of public instruction states that, in the year 1860 there were in the whole of the empire 8,937 schools with 950,002 pupils. This gives one pupil to every 77 inhabitants. Other calculations give a much lower rate of public education, stating the proportion of school-attending children to inhabitants as 1 to 140.

Since the epoch of the Polish insurrection, all Russian subjects have been forbidden from studying in any foreign university. A strict surveillance is exercised over all descriptions of schools; no private schools can be opened without permission from the proper authorities, and all masters and mistresses of such seminaries must be native Russians; and it is further ordered that no one shall be a teacher in a private family without being accredited by a university, and having a certificate of capacity and good conduct. The sciences principally taught in the universities are the history, literature, geography, and statistics of Russia. Lectures on politics or political economy are esteemed dangerous, and are forbidden. The object of these regulations is manifest. But, whatever may be the case with the higher branches, the government has had sagacity to perceive that the diffusion of elementary instruction, including the principles of the useful arts, would not tend to shake the stability of the existing order of things, while it would do more than anything else to raise the peasantry from the state of ignorance in which they are, and to develop the resources of the country. Great numbers of new schools have been opened within the last half dozen years; and lectures on agriculture, and the application of science to art, have been established in the different universities. A taste for instruction and reading is also beginning to be widely diffused among the town pop. Many new works, some of them of considerable merit, annually appear; and many foreign works are translated into Russian. Numerous literary and scientific journals issue from the presses of Petersburg, Moscow, Riga, Odessa,

and other towns. But all works and journals imported from abroad must be submitted, under heavy penalties, to the inspection of the censors. This jealousy of whatever might tend to expand the minds of the people, and to make them acquainted with their rights and duties, is the grand obstacle to the civilisation of the higher classes.

Professors and teachers in universities and other seminaries obtain rank and rise according to merit and seniority; and when unfit for the active duties of their station, they receive a small pension. But their regular salaries, like those of almost all other functionaries, are totally inadequate to support their rank and station in society. A professor has only about 80*l.* a year, and his assistant 32*l.*; a professor of languages has 24*l.*, and each of the students, supported by the crown, 8*l.* a year. The institutions of Moscow and Tsarskoi-Zelo are the most distinguished of those intended for the instruction of nobles. In the first there are about 300 boarders, paid for by their parents; the rest attending as day-scholars. The first class pay 32*l.* a year, and the second 24*l.* The pedagogical institution of Petersburg is one of the most important and valuable in the empire. It is exclusively appropriated to the education and training of schoolmasters.

Young men belonging to great families used formerly to be, for the most part, educated at home by foreign tutors, of whom not a few were ignorant, unprincipled, and servile. But an edict of the emperor Alexander I. contributed to subvert this practice, by excluding all young men, not educated at a public seminary, from the higher class of public employments.

Races.—The Russian empire embraces at present an immense variety of different races; but the great bulk of the nation, or the Russians properly so called, with the Poles, and also the Bulgarians and Servians, belong to the great Slavonic family. The Slavonians are most generally supposed to be the descendants of the *Sarmatæ* of antiquity; but, though probable, this is by no means certain. At all events, they are radically distinct from the Goths, on the one hand, and from the Tartars and other Eastern nations, on the other. There is no foundation whatever for the common opinion that they were denominated Slavonians from their being originally slaves. On the contrary, when first known to history, the Slavonians were as free as the Goths. The practice of slavery was gradually introduced; and in Russia it was not completed till the beginning of last century.

The next principal race is that of the Ouralians or Finns, inhabiting the grand duchy of Finland, Esthonia, Lapland, and several districts in the north of the empire. The Finnish population is believed to amount, in all, to above 3,000,000 individuals. The Letto-Lithuanian race, amounting to nearly 2,000,000, is principally found in Lithuania and the W. provs. There are, also, above 2,000,000 Tartars; 2,000,000 Georgians and Armenians. The Germans settled in various parts of the empire may be taken at about 450,000; and there are, besides, 1,060,000 Jews, with Samoyedes, Mongolians, Kamchatskades, and Americans.

Language.—There are within the Russian empire about forty distinct languages in use, having attached to them an immense number of different dialects. The individuals belonging to the Slavonic race have two languages—the Russian and the Polish, both derived from the ancient Slavonic. This mother-tongue, augmented and modified by the influence of Christianity, which introduced it into a number of Greek words, and by the dominion of the Tartars, by whom it was

loaded with Turkish and Mongolian terms, was gradually formed into the Russian. The primitive idiom continued, however, to be employed in the liturgy and the sciences till the reign of Peter the Great, when the Russian gained that ascendancy in religion and science it had already gained in conversation. The extraordinary advances that were then made in civilisation occasioned the introduction of an immense number of new words. At length the language became tolerably well fixed. The alphabet, which consisted originally of 45, has been reduced to 37 letters, some of them borrowed from the Greek and others from the Latin. Some characters are, however, quite unlike those of any other language, and can hardly be pronounced by any save Slavonians. The grammatical forms are not well defined, and the conjugations are exceedingly irregular. Otherwise the language is rich, sonorous, flexible, natural, and elegant. The variety of its terminations is very remarkable. There is very little *patois* in Russia; the language of the country differing but little from that of the towns. There are, however, three principal dialects characterised by Prichard (*History of Mankind*, iii. 410) as follows:—

1. 'The *pure or proper Russian*, the cultivated language of the whole Russian nation, spoken in Moscow and all the central parts of the European empire of Russia. Vulgar and corrupted branches of this dialect are those of Susdal and Oloneiz, the last of which is intermixed with Finnish words.

2. 'The *Malo-Russian*, the language of the south-eastern parts of European Russia, approaching to the old Slavic in many forms of expression and in the enumeration of some consonants. This dialect is, perhaps, richer than any other in national songs, many of which have a peculiar beauty.

'The *Malo-Russian* is essentially the same idiom as that of the Russniaks or Ruthenians, inhabitants of the eastern part of Galicia and the north-eastern districts of Hungary and Poland, who are about 3,000,000 of people. They belong to the Greek Church, although beyond the limits of the Russian empire.

3. 'The *White Russian* is the dialect spoken in Lithuania and in part of White Russia, especially in Volhynia. The historical documents of Lithuania were written in this dialect, which was in use as a written language in the 16th and 17th centuries.'

It is a curious fact, that the first grammar of the Russian language appeared at Oxford in 1696. The best grammar is that of Dobrowski, published at Vienna in 1822. The Russian Academy has published a dictionary of the language in 6 vols. 4to., 1806–1822.

Literature.—Russia has had several distinguished natural philosophers and mathematicians, but they have been chiefly foreigners (Germans principally) resident in the country. At present the native literature of Russia occupies a respectable place in that of Europe. The introduction of Christianity was marked by the growth of a taste for letters among the ancient Slavonians; but the only remains of that early literature are some fragments of chivalrous poetry, and the annals of the monk Nestor. The Tartar invasion arrested the progress of literature, and Russia fell back into the abyss of barbarism, whence she did not begin to emerge till after the accession of the house of Romanoff. The attempts of the restorers of literature were at first confined to some feeble dramatic performances; and towards the close of the 17th, and the beginning of the 18th centuries, to miserable imitations of French and other foreign works.

In the course of the 18th century, however, Lomonosoff created, by his precepts and his example, a national literature. Sonmarokoff carried the drama to a high degree of perfection, and since then a crowd of writers have distinguished themselves in all departments, from the *epopeia* down to eclogue and fable, and the national literature continues to flourish with undiminished vigour. The History of Russia, by Karamzin, though it reaches only to 1603, is a work of great merit. Numerous journals or periodical publications, in different languages, devoted to politics, literature, and science, appear in different parts of the empire; but so long as these are subjected to a severe censorship, and as the government looks with jealousy on anything approaching to the expression of a free opinion, the political and philosophical works of Russian writers can be but little deserving of attention. The first Russian press was set up at Kieff, in 1551. Previously to 1800, there had not been printed above 1,000 works in Russia; in 1807, the number of such works was about 4,000; in 1821, they amounted to 13,249, and at present to more than treble this number, about a fourth part being translations from the French and other foreign languages.

Russia has some splendid libraries and museums. The imperial library at Petersburg contains about 400,000 vols. and 17,000 manuscripts; and the Romantzow Museum contains a large collection of national antiquities and of every kind of curiosities.

Religion.—Most religions to be found in the ancient continent have their adherents in Russia. The court, however, and the great body of the nation profess the Russo-Greek Christian faith, denominated by its votaries the orthodox or true Catholic faith. The points in which it principally differs from the Roman Catholic faith, are, its denying the spiritual supremacy of the pope, its prohibiting the celibacy of the clergy, and its authorising all individuals to read and study the Scriptures in their vernacular tongue. The prohibition of celibacy is carried to such an extent, that no priest can perform any spiritual function before he is married, nor after he becomes a widower; and as he is not allowed to remarry, the death of his wife and the cessation of his functions as a priest (unless he be specially allowed by the bishop to continue them) are necessarily identical. The priests may, however, on the death of their wives, enter into a convent, and enjoy the barren privilege of becoming eligible to be dignitaries of the church. Pictures of saints are admitted into the Russo-Greek churches and houses; but all statues and bas-reliefs, are rigidly excluded. There are several fasts, of which that of Easter, which continues for seven weeks is the longest and strictest. Divine service is performed in the native tongue; and singing in churches is unaccompanied by any sort of instrumental music. The total pop. professing the Russo-Greek faith may be estimated at about 50,000,000. No country in Europe possesses such a number of fine churches as Russia. The meanest village is generally furnished with a temple ornamented with gilt domes and spires. These edifices are nearly all in the Grecian style of architecture, substantially built of brick, plastered and painted with much taste, forming a striking contrast to the huts or izbus of the peasantry by which they are surrounded.

There are in Russia nearly 500 cathedrals and about 29,000 churches attached to the established faith, the latter employing about 70,000 secular or parochial clergymen. There are also about 550 convents, of which 480 are for men and 70 for women. Adjoining to each church or near it,

there is always a *kolokolnia* or belfry, commonly of great height, and provided with large bells, which are tolled several times during every service, and on holidays kept ringing the whole day. The Russians are passionately fond of the sound of bells, and larger and finer ones are nowhere to be found; every church has in its steeple four or five of different sizes; and in many this number is doubled and even trebled.

The Russian church was long subordinate to that of the Eastern empire, its metropolitan being nominated by the patriarch of Constantinople. But after the capture of the latter city by the Turks in 1453, the Russian clergy appointed their own metropolitan. This practice continued till the reign of Peter the Great, who declared himself the head of the Russo-Greek church, appointing, at the same time, a synod for the management of its affairs. The clergy are either secular or regular—the former consisting of the parochial clergy, and the latter of the higher dignitaries and monks. The hierarchy is composed of bishops, archbishops, and metropolitans. There are in all thirty-eight dioceses.

In Russia, as in most other countries, the piety, or superstition of individuals, had conferred great wealth on the church, particularly on the monasteries. This having occasioned many abuses and irregularities, afforded a pretext, of which Peter the Great availed himself, not only to suppress various monasteries, but to deprive the church of the greater part of its wealth. In the reign of Catherine II., the degradation of the clergy was completed by the appropriation of the whole immoveable property of the church to the use of the state, pensions being assigned, in its stead, to the different functionaries to whom it had belonged. But, with the exception of a few livings in Petersburg, Moscow, and other principal cities, the stipends of the clergy, even when increased by the offerings of the people, and by the perquisites on occasion of births, marriages, and funerals, are quite inadequate to provide for their comfortable subsistence. The total number of established clergy, of all ranks and orders, may be taken at about 254,000; and the sums allowed as stipends by government is so very small, that they are almost wholly dependent on their flocks. The revenue even of the senior metropolitan, the highest dignity in the hierarchy, did not recently exceed 600*l.* or 700*l.* a year; and an archimandrite, or abbot, the class next below a bishop, had not generally more than from 40*l.* to 50*l.* a year. Mr. Coxe (*Travels in Russia*, iii. 143,) says, that 'besides the surplice fee, which in the poorest benefices amounts to 4*l.* a year, and in the most profitable to but 20*l.*, they have only a wooden house, scarcely superior to that of the meanest among their parishioners, and a small portion of land, which they generally cultivate with their own hands; while the highest dignity to which they can ever attain, so long as they continue married, is that of a prototype of a cathedral, whose income scarcely exceeds 20*l.* a year.'

The duties of the Russian clergy of all orders are very laborious. There is in the family circles of the secular or parochial clergy a degree of culture and good manners peculiar to themselves. This description of clergymen wear long beards, and form, in fact, like the priests of old, a kind of distinct class, or caste. None but the sons of clergymen are educated for the church; nor is there one instance in a thousand of any one belonging to any other class entering the ranks of the secular clergy. The regular, or dignified clergy, on the contrary, though often the sons of priests, not unfrequently receive recruits from

among the nobles and other classes; and all the higher stations in the church continue to be filled up from their ranks. Orders and other marks of distinction are conferred on the Russian clergy; and at present a bishop is little thought of unless he be decorated with the star and ribbon of some order of knighthood.

The Russo-Greek church has, from an early period, had its schisms and dissenters. The latter are said to be split into about 70 sects. They are classed under the common denomination of *raskolniks*. The ritual, or service of the Russian church is contained in *twenty volumes folio*, in the Slavonic tongue.

With the exception of the restraints laid on the Jews, who are excluded from Russia Proper, almost all religions may be freely professed anywhere in the empire. No member of the Russo-Greek church is, however, permitted to renounce his religion; and when a marriage takes place between one of its members and a person belonging to another faith, the children must all be brought up in the established faith. Catholics are very numerous in the Polish provs.; there are, also, large numbers of Lutherans, chiefly in the Baltic provinces, about 1,300,000 Mohammedans in Russia in Europe, with Jews, worshippers of the Grand Lama, Feticists, and other Pagans.

Finances.—Owing to the low state of civilisation in most parts of the Russian empire, and the want of manufactures and great towns, the public revenue is by no means so great as might be supposed from the vast extent of the empire, and the magnitude of the pop. The first detailed account of the revenue and expenditure of the Russian empire was issued by the minister of finance in May 1862. It stated the estimated income for the year 1862 at 295,861,839 roubles, or 42,265,977*l.*, and the expenditure at 310,619,739 roubles, or 44,374,248*l.*, leaving a deficit of 14,757,999 roubles, or 2,108,271*l.* The following were the chief items of this financial statement:—

REVENUE FOR 1862.

| | Roubles |
|--|--------------------|
| Poll-tax, or 'Poduschnaja' | 28,258,862 |
| Land-tax, or 'Obrok' | 25,256,733 |
| Mines, Forests, and Domains | 11,798,032 |
| Excise and Trade Licenses | 24,228,978 |
| Custom Dues | 31,800,000 |
| 'Brandy-farming,' or 'Otkoupe' | 123,022,580 |
| Various Indirect Taxes | 34,987,624 |
| Miscellaneous Revenue | 16,509,030 |
| Total | 295,861,839 |
| | £42,265,977 |

EXPENDITURE FOR 1862.

| | Roubles |
|--|--------------------|
| Interest on National Debt | 54,296,138 |
| Ministry of War | 106,575,892 |
| " of Public Instruction | 4,156,824 |
| " of the Navy | 20,589,831 |
| " of Justice | 5,502,896 |
| Clergy and Holy Synod | 4,661,098 |
| Civil and Military Pensions | 18,180,069 |
| Subventions to Railway Companies | 7,759,662 |
| Other Expenses | 93,897,279 |
| Total | 310,619,739 |
| | £44,374,248 |

The following were the gross sums of revenue and expenditure during the three years 1854-56, according to official statements:—

| Years | Revenue | Expenditure | Deficit |
|-------|------------|-------------|------------|
| | £ | £ | £ |
| 1854 | 33,006,000 | 49,939,632 | 16,833,632 |
| 1855 | 31,029,000 | 67,086,611 | 36,057,611 |
| 1856 | 31,605,000 | 77,702,291 | 36,097,291 |

According to an official report of the minister of finance, dated November 7, 1861, the national debt of Russia consisted of—

| Funded Foreign Debt:— | | Roubles |
|---|--|--------------------|
| Dutch Loan at 5 per cent. (42,921,000 fl.) | | 23,540,000 |
| English Loan at 4½ per cent. (£9,500,000) | | 61,100,000 |
| " at 3 " (£7,000,000) | | 44,800,000 |
| Rothschild Loan at 5 " (£15,000,000) | | 95,000,000 |
| Foreign Loans Contracted at various Periods | | 129,157,700 |
| Total | | 353,597,700 |
| | | £50,513,957 |

| Funded Home Debt:— | | Roubles |
|--|--|--------------------|
| Loan at 6 per cent. | | 73,993,847 |
| Exchequer Bills at 4 per cent. | | 22,863,658 |
| Liabilities to Banks | | 129,759,492 |
| Total | | 226,616,997 |
| | | £32,372,428 |

| Floating Debt:— | | Roubles |
|------------------------------|--|--------------------|
| Treasury Bills | | 325,000,000 |
| Poland and Finland | | 93,000,000 |
| Total | | 418,000,000 |
| | | £59,714,300 |

Not fully included in this account, though properly belonging to the floating debt, are above 750 millions of paper money, called bills of credit, issued by government on the guarantee of all the banks and other credit establishments of the empire, united into a state bank by imperial decree of September 1, 1859. The capital of these establishments, which are under the direction and supervision of the minister of finance, is stated to amount to 96,241,618 roubles, or 13,748,802*l.* The note circulation of Russia has increased very rapidly of late years, while the specie has diminished at the same time.

Historical Sketch.—The ancients had very little acquaintance with the vast countries included in the empire of Russia. The monarchy is usually regarded as having been founded by Rurik about anno 862, his dominions and those of his immediate successors, comprising Novgorod, Kieff, and the surrounding country. In 980-1015, Vladimir introduced Christianity, and founded several cities and schools. But, from this period down to 1237, when the country was overrun by the Tartars, Russia, with few exceptions, was the theatre of civil war. In 1328 the seat of government was transferred to Moscow; and in 1481 the Tartars were finally expelled. In 1613 the house of Romanoff, whence his present majesty is descended, was raised to the throne; and from this period the empire acquired strength and consistency. Under Alexis Mikhailovitch (1645-1676) White Russia and Little Russia were conquered from the Poles, and the Cossacks of the Ukraine acknowledged the supremacy of the Czar, various internal improvements were effected, and the power of Russia began to be felt and feared by all her neighbours. At length, in 1696, Peter the Great ascended the throne, and the destinies of Russia and of the northern world were immediately changed. This prince, who has probably a better claim than any other that ever existed to the epithets of 'great' and of 'father of his country,' gave to the arms of Russia a decided preponderance in the north of Europe; he also gave her a fleet; conquered large provinces on the Baltic; laid the foundations of the noble city which bears his name; and introduced among his people the arts, the literature, the customs, and, to some extent also, the laws and institutions of the more civilised European nations. The difficulties he had to encounter in his projects for remodelling and civilising his dominions were of the most for-

midable description; and could not have been overcome by any one possessed of less authority, or of a less stern and decided character.

From this period Russia has progressively advanced in power and civilisation. Under Catherine II. (1762-1796), a princess of extraordinary talent, Russia acquired a great accession of power by her acquisitions in Poland and on the Black Sea, where she has now the same ascendancy as in the Baltic. The history of Russia, during the present century, is well known. The attempt of Napoleon I. to dictate a peace to the emperor Alexander I., in the ancient capital of the czars, led to the overthrow of his power, and gave a vast accession of influence and consideration to Russia. This influence has been maintained to the present time, notwithstanding the Crimean war, which for a moment humbled the military pride of Russia.

RUSTCHUK, or RUTZCHUK, a fortified city of Turkey-in-Europe, prov. Bulgaria, cap. Sanjak, on the Danube, 56 m. E. by N. Nicopolis, and 62 m. NW. Shumla. Pop. variously estimated, but probably about 30,000. The city is built on a steep bank, up which the streets ascend from the river. It is surrounded on three sides by walls, in the manner of Turkish fortifications; but towards the river it is partly open. At its NE. extremity is a ruined citadel, on an abrupt height above the Danube. The streets are narrow and gloomy; on either side they present only dead walls; and as in all the rest of Bulgaria and in Roumelia, each of the larger houses is a fortress in itself. The governor's palace, some of the mosques, and some public baths are the only edifices worth notice. Many of the buildings are white-washed, and their tall chimneys are visible at a great distance. Woollen, silk, and cotton stuffs are made here; and there are many Turkish, Greek, and Armenian merchants in the town, who carry on considerable trade with Wallachia, in cloth, corn, and indigo. In 1812, the Russians took and burned the citadel and a part of the town; and, in 1829, they entered the town after little opposition.

RUTHERGLEN (pronounced Ruglen), a royal and parl. bor. of Scotland, co. Lanark, on the left bank of the Clyde, $2\frac{1}{2}$ m. SE. of Glasgow. Pop. 8,062 in 1861. The town consists of one leading street, straight and well-paved, nearly $\frac{1}{2}$ m. in length, 112 ft. broad, and of the parallel lane called the Back Row. From both sides of the main street, which lies in a direction nearly E. and W., go off a few cross lanes. There are no public buildings except the par. church, a *quoad sacra* place of worship connected with the establishment, a chapel belonging to the Relief, and the town-hall. A small cotton-mill employs about 80 hands; and there are two print-works in the vicinity, a Turkey red dye-work, and a chemical work. About 500 hand-loom muslin weavers are employed by Glasgow manufacturers.

Rutherglen was created a royal bor. in 1126, at which time it was of more importance than Glasgow, the latter being included within its municipal boundaries. But in 1226, Alexander II. granted a charter to Walter, Bishop of Glasgow, relieving his town from certain servitudes previously due to Rutherglen. Previously to the passing of the Reform Bill, in 1832, Rutherglen, unimportant as it has been, enjoyed the same parliamentary privileges as Glasgow; being united with it and two other towns in sending 1 mem. to the H. of C. Glasgow has since that period had 2 representatives for itself; while Rutherglen joins with Kilmarnock and 3 other bors. in choosing a mem. Registered voters 197 in 1865. Municipal

councillors, 18; corporation revenue, 1,116*l.* in 1863-64.

RUTHIN (Welsh *Rhudd-ddyn*, or *Rhuthyn*, the 'Red fortress'), a parl. and mun. bor., market-town, and par. of N. Wales, co. Denbigh, hund. Ruthin, in the vale of Clwyd, 17 m. WSW. Chester, and 45 m. NW. Shrewsbury. Pop. of mun. and parl. bor., 3,372 in 1861. The town, situated on rising ground, chiefly E. of the Clwyd, consists of a principal avenue, entered by several other inferior streets. At the summit is the market-place, in which is the town-hall, a substantial building, erected in 1663, but recently repaired. The co. hall, a fine modern stone structure, forms with the gaol an interesting feature in the town. The gaol, enlarged by the addition of a building for female prisoners, has suitable arrangements for the classification of the inmates. The church has an ancient structure of mixed architecture; the tower, S. and W. fronts, being comparatively modern, and much inferior to the rest of the building. It was made collegiate in 1310 by John de Grey, who formed an establishment for regular canons, and endowed it with valuable lands and numerous privileges. A part of the cloisters has been converted into a residence for the warden of Christ's Hospital, founded here by Dr. Gabriel Goodman, for the support of 12 decayed housekeepers. The warden and pensioners are impropiators of the great tithes of Ruthin and Llan-Rhydd; and the warden is the vicar of both parishes, with an income of 263*l.* a year. The free grammar-school, endowed with a moiety of the tithes of Llan-Elidan, and under the superintendence of the warden, ranks as one of the best in N. Wales, and is attended by about 50 boys. A national school is established here for 40 children of each sex; and there are Sunday schools attached to the chapels of the Independents, Wesleyan and Calvinist Methodists. No particular trade or manufacture is carried on in the town, exclusive of what is necessary for the accommodation of the inhabs., who are principally employed in agriculture.

The corporation of Ruthin consists of a mayor, 3 aldermen, and 12 councillors. The bor. unites with Holt, Wrexham, and Denbigh, in sending 1 mem. to the H. of C. The parl. limits, according to the Boundary Act, include, with Ruthin, parts of the pars. of Llan-Fawr, Llan-Rhydd, and Llan-Fair-Dyffryn-Clwyd. Reg. electors for the united bors., 889 in 1865. Ruthin is likewise one of the polling places at elections for the co., and the assize town; besides which the quarter sessions are held alternately here and at Denbigh. Markets, well supplied with corn, on Monday, and a provision market on Saturday.

Ruthin, according to the Welsh historians, is of high antiquity; but we have no authentic information respecting it prior to the reign of Edw. I., who built here a magnificent castle, overlooking the Clwyd, on its W. bank, which he presented, in 1281, to Reginald de Grey. The ruins have been restored with admirable taste by the present proprietor, Lady Grey de Ruthlin, daughter of the 19th baron of that name, who has been a great benefactress to the town.

RUTLAND, an inland county of England, surrounded by Lincoln, Leicester, and Northampton. It is the smallest of the English cos., containing only 95,360 acres, of which about 90,000 are arable, meadow, and pasture. Surface, gently varied; air pure; and the soil almost every where loamy and rich. The W. part of the co., in which is the Vale of Catmose, celebrated by Drayton, is under grass, and the E. chiefly in tillage. It is particularly celebrated for its wheat, cheese, and sheep. Estates and farms of various sizes. The

river Welland runs along its SE. border, from Rockingham to near Stamford; and there is a canal from the river Soar to Oakham, the principal town. It is divided into 5 hundreds and 25 parishes; and returns 2 members to the H. of C., both for the co. Registered electors, 1,774 in 1865. At the census of 1861, the co. had 4,641 inhabited houses, and 21,861 inhabs., while in 1841, Rutland had 4,294 inhab. houses, and 21,302 inhabs.

RYDE, a town, sea-port, and watering-place of England, on the N. side of the Isle of Wight, par. of Newchurch, and hund. of E. Medina liberty, $5\frac{1}{2}$ m. ENE. Newport. Pop. 9,269 in 1861. The town has a handsome appearance from Portsmouth, opposite to which it lies, at a distance of about 5 m.; its white houses, interspersed with gardens and plantations, being ranged in successive rows upon a tolerably steep acclivity, rising directly from the sea, backed by bold hills, and surrounded with cultivated land. It consists of a principal street, running upwards from the shore, and intersected by others, some of which comprise handsome detached residences, well adapted for the numerous visitors who flock thither during summer. It has several other churches, one of which is a handsome modern structure, places of worship for Wesleyan Methodists, Baptists, and Independents, with attached Sunday-schools, and an endowed charity school: it has, also, a small theatre, assembly-rooms, libraries, and baths. The accommodation for summer visitors have been greatly improved within the last few years, since Ryde has risen into favour; and a pier, constructed on wooden piles, runs $\frac{1}{2}$ m. into the sea, making the town accessible seaward at all times of the tide. Steam-boats run nearly every hour in the day, during summer, between Ryde, Portsmouth, Cowes, and Southampton; and the opening of the South Western railway has occasioned a great influx of visitors to this and its rival watering-place, W. Cowes. The air is salubrious, and in the environs are many agreeable walks commanding fine land and sea views; but, as a bathing place, Ryde is inferior to Southsea, on the opposite coast of Hampshire, or to Cowes, on account of the shallowness of the water for a lengthened distance from shore. It has no manufactures, and its trade is principally confined to the supply of visitors and the inhabs.

RYE, a parl. and mun. bor., cinque port, market town, and par. of England, co. Sussex, hund. Godstow, rape Hastings, on the Rother, about 3 m. from its mouth, 38 m. E. by N. Brighton, and 53 m. SSE. London, on the South Eastern railway. Pop. of parl. bor. (which comprises with the par. of Ryde, that of Winchelsea, and 6 others, with a portion of the par. of Brede) 8,202 in 1861. The town, which stands on the edge of an extensive tract of marsh land, running along the coast as far as Hythe, consists of several regular and well formed streets, lined with old but respectable looking houses, many of which command fine views of the channel and surrounding country. In the centre of the town is the market-house and town-hall, with an old structure called the Ypres Tower, occasionally used as a gaol. A public library is

supported by subscription, and there is a small theatre. The church is a large cruciform structure, with a central tower, partly of Norman and partly of early English architecture: the aisles of the choir have fine lancet windows, and there is a large and fine perpendicular E. window. The living is a vicarage, in the gift of the Earl of Burlington. The Wesleyan Methodists, Independents, and Baptists have their respective places of worship, with attached Sunday-schools, and it has a small endowed grammar-school, an English school, with several almshouses and other charities. There is no manufactory in the town, which depends upon being the port and market through which the surrounding rich agricultural district is supplied. Some years since it is said to have been in a declining condition; the reverse, however, is now the case, and it appears to be, indeed, in an eminently thriving state. This is mainly attributable to the improvements lately made in the harbour and in the navigation of the river, which have made the town accessible to vessels of 200 tons. By means of the Rother and its branches it supplies the surrounding country to a distance of 8 m. with coals and other articles; and there is a canal which extends the navigation as far as Robert's Bridge, a distance of 15 m. in a straight line. On the 1st of Jan. 1864, there belonged to the port 51 sailing vessels under 50, and 51 vessels above 50 tons, besides 1 steamer of 21 tons. Gross customs revenue 463*l.* in 1863. The exports are chiefly wool, oak timber, and bark. A considerable quantity of hops is raised in the neighbourhood, for the drying of which large quantities of Welsh coal are annually imported.

Rye is a bor. by prescription, and is governed under the Municipal Reform Act, by a mayor, ■ other aldermen, and 12 councillors, styled 'the mayor, jurats, and commonalty of the ancient town of Rye.' Courts of session are held under a recorder; and there is a court for the recovery of debts under 40*s.* Rye returned 2 mems. to the H. of C. from the 42 Edward III. down to the Reform Act, which deprived it of one of its members, and at the same time enlarged the electoral limits, so as to comprise with the old bor. the rest of the par. of Rye, the town and par. of Winchelsea, with six other entire pars., and a small portion of the par. of Brede. Reg. electors, 562 in 1865. Markets on Wednesday and Saturday; fairs, Whit-Monday and Aug. 10.

Rye is very ancient, but its early history is little known. It appears to have been an original Cinque Port, and is mentioned as a member of these ports in a charter granted by Henry III. In the reign of Edward III. the town was so considerable, that it sent 9 armed vessels to the royal fleet when the king undertook the invasion of France. In the next reign, A.D. 1377, it was plundered and burnt by the French, but it soon recovered its consequence. The rise of other ports on the same coast during the last century, and the filling up of its port, occasioned a considerable decrease of its importance, which, however, as above seen, it has now a fair prospect of in some measure recovering.

S.

SACKETT'S HARBOUR, a village or town and port of entry of the U. States of N. America, state New York, co. Jefferson, on a bay at the E. end of lake Ontario, at the mouth of Black river, 41 m. NE. Oswego, and 150 m. NW. Albany.

Pop. 10,525 in 1860. The town extends more than a mile along the bay. The harbour is the best on the lake, and is used by the American government for ship-building, and as a naval depôt. A peninsula juts out from the lower extremity of

the town, forming an inner and outer harbour, the latter of which has water sufficient to float the largest ships of war within 2 fathoms of the shore. Near the mouth of Black River is another equally good port, and vessels of the largest class are built at both. A considerable trade is carried on from this port by the lake and the St. Lawrence; and by the Oswego, Erie, and Welland canals. Numerous vessels for the navigation of the lake are built here.

SAFFI, AZAFFI, or ASFI (an. *Safia*), a city and sea-port of Morocco, prov. Abda, on the Atlantic, near Cape Cantin, and 95 m. NW. Morocco. Pop. estimated at 12,000, including about 3,000 Jews. The city is built in a sterile ravine between two hills, being very hot in summer, and disagreeable in winter, as the waters from the neighbouring mountains, occasioned by the rains, discharge themselves through the main street into the ocean, deluging the lower apartments of the houses. The place has thick and high walls, and a palace, formerly the occasional residence of the emperor's sons; a little way N. of the town is a small fort. Its roadstead is safe in summer, but in winter, when the winds blow from the S. or SW., vessels are obliged to run to sea, which they have been known to do several times in the course of a month, while taking in their cargoes.

Saffi was formerly an emporium of the European trade with Morocco, but its commerce has declined with the rise of Mogadore; on the foundation of which, in 1760, the emperor ordered the removal thither of all the merchants of Saffi. The Moorish and Bedouin inhabs. are fanatical and intolerant, and said to be inimical to Europeans, with whom, however, they have now little intercourse. In the environs are many Mohammedan sanctuaries. The city is supposed to have been founded by the Carthaginians. In modern times it belonged to the Portuguese, from 1508 till 1641.

SAFFRON-WALDEN (an. *Saffron-weald-den*, 'the woody hill abounding with saffron'), a municipal bor., market town, and par. of England, co. Essex, and hund. Uttlesford, 28 m. NNW. Chelmsford, and 37 m. NNE. London. Pop. 5,474 in 1861. The town, in a valley close to a tongue of high land, surmounted by the church, comprises several good streets and a spacious market place, with a neat town hall. Many of the houses are good, and the place generally bears an appearance of neatness and comfort. The church, which stands so high as completely to overtop the town, is an elegant structure in the perpendicular style, with an embattled tower at its W. end. The Independents, Baptists, Unitarians, and Friends, have places of worship. A free grammar-school, endowed by Edward VI., has an exhibition at Queen's College, Cambridge; but the education is now conducted on the national plan, and connected with it is a girls' school, the whole furnishing instruction to about 250 children of both sexes. There are likewise several Sunday-schools, some almshouses lately rebuilt, and various other money charities. Saffron-Walden has several large malting establishments, and enjoys a good retail trade for the supply of the numerous wealthy families in its vicinity; besides which it has well-attended markets for corn, cattle, and provisions. The neighbourhood is extremely productive, and well cultivated; but the growth of saffron (whence the name of the town) has been abandoned. The bor. was incorporated by Edward VI., in 1549, and is governed, under the Municipal Reform Act, by a mayor, 3 aldermen, and 12 councillors. Petty sessions for the hund. are held every alternate week, and there is a court for the recovery of debts under

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107. Saffron-Walden is also one of the polling places at elections for the N. div. of Essex, and the principal town of a poor-law union, embracing 24 pars. Markets on Saturday; fairs, for horses and cattle, Saturday before Midlent Sunday, and November 1.

SAHARA, or the great central Desert of Africa. (See AFRICA.)

SAID (an. *Sidon*), a town and sea-port of Asiatic Turkey, celebrated in remote antiquity as one of the greatest emporiums of the Mediterranean, and as being the parent city of Tyre. Its modern representative is seated on the N. side of a cape extending into the Mediterranean, 22 m. NNE. Tyre, 20 m. SSW. Beyrout, and 55 m. W. Damascus; lat. 33° 34' 5" N., long. 34° 22' 40" E. Pop. estimated at from 4,000 to 5,000, of whom more than half are Christians of the Greek church. Sidon may be compared with Beyrout as to its pop. and extent, and its streets are equally irregular and filthy; but its situation is more pleasant and advantageous, its houses are better built, and it has *khan*s of considerable extent, and which would not disgrace any city of Europe. Most of these have their own fountains, independent of those distributed through the town. The Aula supplies Said with water, which is brought from it by a channel kept in ill repair, for a distance of more than a league. The streets in the upper town, which stand upon an acclivity, are narrow and gloomy, being arched over in many places, like those of Jerusalem. The lower part of the town is more cheerful. The bazaars are well supplied, especially with leather goods. Most of the houses have gardens attached. On the land side the town is defended by a high wall, now partly in ruins, as well as by a fortress, on a hill to the S., said to have been constructed by Louis IX. of France. There are several mosques, both within and without the town.

It has been generally supposed that the ancient city was about 2 m. further inland, and, like many other maritime cities of antiquity, at some distance from the sea-shore, on which its port was situated. The non-existence of any antiquities worth notice at Said seems to favour this opinion; while, at a place called Old Sidon, at about the distance above stated, some traces of ancient walls and other buildings are still discoverable. There can, however, be no doubt that the harbour on the N. side of the present town was the port of the ancient as well as the modern town. Here is a quay formed of very thick walls, in parts of which a tessellated pavement of variegated marbles, with representations of animals and festoons, still exists in tolerable preservation. Many granite columns are also wrought into the walls, and others stand as posts to a bridge of several arches, which runs from the main land, to a castle built in the sea, by Fahr-ed-Din, the celebrated emir of the Druses, in the 16th century. The latter, aiming to render himself independent of the Porte, not only fortified Said, but, in order to make its harbour inaccessible to Turkish galleys, choked it up by sinking boats filled with the *débris* of ancient buildings. This measure gave a severe blow to the commerce of the town, the roadstead being so insecure that scarcely a fisherman's skiff can lie in it in safety; but even at the end of the last century, the French merchants of Said had a considerable trade with Marseilles, to which they exported cotton, silk, and woollen goods, fruits, corn, oil, scammony, galls, soda, and wax. At present, the principal resources of the inhabitants are derived from dyeing, and from the manufacture of leather and silk goods.

Sidon is first mentioned in Gen. x. 15, 19, and

appears to have risen into importance at a very early period, since it is spoken of in Joshua as the 'great Zidon,' (ch. xi. 8; xix. 28.) In the division of Palestine it was allotted to the descendants of Asher, but we learn from Judges, i. 31, that it never came into the actual possession of that tribe. Its inhabitants were anciently eminent in ship-building, and were employed by Solomon in the construction of the temple, there being, among the Jews, none who had 'skill to hew timber like unto the Sidonians.' Pliny states that it was also famous for its glass manufactures. In its commercial importance it appears, however, to have been early eclipsed by Tyre, and afterwards generally followed the fortunes of that city. In the middle ages, during the Latin kingdom of Jerusalem, it was a lordship, and an episcopal see under the Tyrian primacy. The crusaders, who lost it in 1111, recovered it from the Saracens in 1150; but were finally obliged to surrender it to the latter in 1289. In its neighbourhood is the convent of Mar-Elias, the residence of the eccentric Lady Hester Stanhope.

SAI-GON, a city, river-port, and cap. of the prov. Gia-Dinh in French Cochinchina, the former empire of Anam. Pop. loosely estimated at 180,000, among whom are many Chinese. It consists of two distinct towns, about 3 m. distant from each other, though the intermediate road be lined all the way with straggling houses. Pingheh, which has the citadel, and is the seat of the governor, is on the W. bank of the great Sai-Gon river; whereas Sai-Gon proper, the main seat of commerce, is on a smaller river, which, however, is navigable for good-sized boats. The two towns are nearly of like size. The streets, which are regular, and intersect each other at right angles, are, in some instances, of great width. Along these, or along canals, many of which traverse the city, the houses are disposed in straight lines, and close to each other. They are built chiefly of mud, enclosed in bamboo frames, and plastered; sometimes they are tiled, but more frequently thatched with palm-leaves or rice-straw. They have seldom more than one story; but some of the better sort are surrounded with an open courtyard, with a gate towards the street. In Sai-Gon proper some of the streets are paved with flags; and quays of stone and brickwork extend nearly a mile along the river. The citadel, in Pingheh, constructed by a French engineer in 1790, has not been completed. It is a quadrilateral fortress, with earth ramparts, bastions, horn-works, a regular glacis, esplanade, and dry ditch. No guns are mounted on it, though there are several French cannon in the arsenal; and at present it is not capable of a regular defence. The interior, which is neatly laid out, has barracks, officers' quarters, and the governor's residence. In the N.E. part of the city, on the banks of a deep creek, are the naval yard and arsenal. The rice magazines, the naval arsenal, and the royal palace, a brick edifice, are the other principal public buildings.

Sai-Gon communicates with the Cambaja river by a canal 23 m. in length, about 80 ft. in width, and 12 ft. in depth. Its foreign trade is principally with China and Siam. The principal articles exposed for sale in the shops are Chinese earthenware, silks, paper, and tea. A few glass bottles and some broad-cloths may be met with, but scarcely any other European goods. The markets are well supplied with poultry, hogs, and oxen, and the flesh of other animals, less suited to a European taste, as dogs and alligators. Fruit is in great abundance, and the variety and excellence of the fish can hardly be surpassed. The

vicinity is well cultivated with rice and areca palm.

SAINTES (an. *Mediolanum* aft. *Santonnes*), a town of France, dép. Charente-Inférieure, cap. arrond., on the Charente, here crossed by a stone bridge, 39 m. S.E. La Rochelle. Pop. 10,962 in 1861. The situation of the town is good, and it is entered from the S. by a finely planted promenade; but it is ill laid out, and is for the most part badly built. It has, however, some remarkable public buildings and antiquities. The cathedral was founded by Charlemagne, and the tower, with the principal entrance, is said to have belonged to the original edifice; but the rest of the structure dates principally from the 16th century. The church of St. Eutropius has a fine steeple, constructed under Louis XI. A celebrated abbey was founded here in 1043, into which Eleanor of Guienne retired, after her divorce from Louis-le-Jeune; its buildings are now converted into cavalry barracks. The sub-prefecture, formerly the bishop's palace; the hospital, originally the seminary; the Protestant church, hall of justice, public library, and theatre, comprise the other chief public buildings. It has cabinets of natural history and antiquities, a communal college, and departmental nursery grounds, and manufactures of hosiery, earthenware, dyeing-houses, and tanneries. Saintes is in the centre of a district, furnishing the best Cognac brandy, in which, and in corn and wool, it has a large trade.

Under the Romans, *Mediolanum* was one of the chief cities of Aquitaine. Some Roman baths exist on the banks of the river; and without the walls are the remains of an amphitheatre, almost as extensive, though not nearly in such good preservation, as that of Nîmes: adjacent to the bridge is a triumphal arch dedicated to Tiberius Drusus and Germanicus, and the ruins of an aqueduct and a circus are still traceable. Saintes was the cap. of the dép. Charente-Inférieure, from 1790 till 1810.

SAINT HELENA. (See HELENA, ST., and so for all the other articles having the prefix of Saint.)

SALAMANCA (an. *Salmantica*), a celebrated city of Spain, kingd. of Leon, and prov. of its own name, on the Tormes (a trib. of the Douro), crossed here by a handsome stone bridge of 27 arches, 92 m. S. by W. Leon, and 119 m. WNW. Madrid. Pop. 15,203 in 1857. The city stands on three small hills, and is surrounded by walls: streets generally steep, narrow, and crooked, extremely dirty, and with a decayed melancholy aspect. There are numerous public places and fountains; but the only one worth notice is the *Plaza mayor*, a fine square, each side of which is 293 ft. in length, surrounded by houses of three stories, all of equal height and exact symmetry, with iron balconies, surmounted by a stone balustrade: the lower part is open, forming a colonnade running all round the square. Bull-fights are held here in June. Among the public edifices, by far the largest is the cathedral, a Gothic building with a superfluity of carving on the exterior; it is 378 ft. in length, and 181 ft. in breadth, the height of the nave being 130 ft. In the interior are some good paintings, and a fine organ with horizontal pipes. The chapter comprises a bishop, 10 dignitaries, and 26 canons. The city has also 25 par. churches; but few of them merit description. The church of St. Stephen, however, which was formerly attached to a Dominican convent, may almost vie in splendour of decoration with the cathedral itself.

Salamanca has, for many centuries, been celebrated as the seat of a university, and the numerous buildings belonging to the various colleges constitute a principal feature in the city: indeed,

so proud are the Spaniards of the collegiate edifices of Salamanca, that they somewhat pompously termed it *Roma la chica* (little Rome). The university was founded in 1239. In the 15th and 16th centuries, the university of Salamanca was attended by from 10,000 to 15,000 students; but its former glory is departed, and there are now less than 400 pupils. Attached to the university is a large library, furnished with a few modern books and piles of scholastic divinity.

Formerly there were 4 public and 25 private colleges; but many of these have fallen to decay, and others were destroyed by the French during their occupation of the city. Few of the remaining colleges retain any traces of their former magnificence, their most valuable effects having been carried off during the peninsular war, while the monastic libraries were burnt by wholesale in 1836. Before the suppression of the monasteries, Salamanca had 580 clergymen; and before the coffers of the churches and convents were emptied to supply the wants of the state, ample provision was made for the support of idleness. Every street swarmed with vagabonds, not merely those who were proper objects of compassion, but those also who, if compelled to work, would have been found abundantly able to maintain themselves. Mendicancy still prevails; but the want of public support must eventually compel the mendicants to apply themselves to industrious callings.

The manufactures of Salamanca are inconsiderable, comprising some fabrics of broad-brimmed hats (*sombreros*), several tanneries, two or three establishments for weaving woollen cloths, and a few others for making starch, glue, and earthenware, besides a pretty large manufacture of shoes. A weekly market is held here, and an annual fair in September. The suburbs abound with well-planted walks; the *huerta*, or irrigated tract near the river, is planted with fruit trees; corn and leguminous plants abound throughout the neighbourhood, and the hills, clothed with oak trees, are depastured by oxen, sheep, and goats, celebrated for the delicate flavour of their meat.

Salamanca, though mentioned by the classical writers under the name of *Salmantica*, appears to have been of little importance under the Romans, though a Roman road and some other monuments are still extant. Salamanca is celebrated in the history of the late Peninsular war for the victory gained in its vicinity on the 22nd July, 1812, by the Anglo-Portuguese army, under the duke of Wellington, over the French, under Marshal Marmont. The struggle was most severe; but the British were completely successful at all points.

SALANKEMENT, a small village of the Austrian dominions, prov. Slavonia, on the Danube, nearly opposite to the embouchure of the Theiss, 28 m. E. by S. Neusatz. It deserves notice from its having been the spot where the first decisive check was given to the progress of the Turks. A powerful army of the latter, commanded by the justly celebrated Vizier Kiuperli, was encountered here on the 19th of August, 1691, by the Imperialists, under Prince Louis of Baden. After an obstinate and well contested action, without any decisive advantage to either party, Kiuperli fell, when the Turks, panic struck by his loss, were totally defeated, leaving above 20,000 men on the field of battle. The loss of the Imperialists did not exceed 8,000 men.

SALEM, a town or city, and sea-port of the U. States of N. America, state Massachusetts, co. Essex, on a tongue of land projecting into the sea, and forming two inlets called N. and S. rivers, 18 m. SE. Newbury Port, and 18 m. NE. Boston, with both of which it is connected by railways.

Pop. 25,870 in 1860. Though not regularly laid out, it is well built and healthy; and with respect to pop., commerce, and wealth, is one of the first towns in New England. It has an atheneum, with a good library, a valuable museum, belonging to the E. I. Marine Society, numerous banks, insurance offices, charitable institutions, and schools, a custom-house, and various public buildings, most of which are substantial brick edifices. The gaol is of stone, commodious, and spacious. In the centre of the town is an enclosed common, comprising about 10 acres, partially planted with trees. The harbour, formed by South River, has good anchorage; but vessels drawing more than 12 or 14 ft. water have to be lightened at a distance from the wharfs. On Baker's Island, at the S. side of its principal entrance, are two lighthouses, one being 117 ft. and the other 126½ ft. above the level of the sea. The town and harbour are protected by two forts. The inhabs. of Salem have long been very largely engaged in the India and China trade, and both their foreign and coasting trade is still considerable. They have also recently engaged in the whale fishery.

A bridge, upwards of 1,500 ft. in length, across N. river, connects Salem with Beverly, a town of about 6,000 inhabitants, engaged in similar pursuits. Next to Plymouth, Salem is the oldest town in Massachusetts, having been founded in 1626.

SALEM, a district of British India, presid. Madras, between the 11th and 13th degs. of N. lat., and 77½ and 80 degs. E. long.; having NE. and E., N., and S., Arcot; SE. and S. Trichinopoly; SW. and W. Coimbatore, from which it is separated by the Cavery; and NW. the Mysore territory. Area, 6,518 sq. m. Pop. estimated at nearly 1,000,000. Its whole surface is above the E. ghauts, and its climate is cool and bracing, which makes it be much frequented by European invalids. It comprises the Barramahli districts, a rich table-land forming its N. portion. Except the Cavery and Poniar, it has few rivers, and no lakes. About three-fourths of the land is assessed under the ryotwar, and the remainder under the zemindar system. Rather more than half the pop. is supposed to be actively employed in agriculture. Maize, rice, and a little cotton are grown, and great quantities of teak, sandal, and black woods grow on the hills; but the principal exports are cloth, ghee, tamarinds, turmeric, jagghery, oil seeds, and iron. Iron ore is very abundant, and good steel is made. Cloth is, however, the staple commodity, and is manufactured for export to the W. Indies and America. The chief imports are areca nuts, silk, and black pepper.

Salem, the chief town, and residence of the British authorities, stands in about lat. 11° 37' N., long. 78° 13' E. It has some trade in cotton cloths.

SALEMI, a considerable town of Italy, island of Sicily, prov. Trapani, cap. cant., on a hill, 20 m. E. Marsala. Pop. 13,860 in 1862. The town is finely situated, but has a most abject appearance. Its inhabs. are indolent, and the town has no trade. Salemi occupies the site of the ancient *Halycia*. Sir R. C. Hoare (Classical Tour in Sicily, ii. 85) supposes that it derives its present name from a Saracen chief of the ninth century.

SALERNO (an. *Salernum*), a celebrated city and sea-port of S. Italy, cap. of prov. of its own name, at the foot of a hill on the NE. shore of the Gulf of Salerno, 17 m. SSW. Avellino, and 28 m. SE. by E. Naples, with both of which cities it is connected by railway. Pop. 24,241 in 1862. The modern city of Salerno is by no means well built; and the narrow and dirty streets, run-

ning on different levels from the immediate edge of the sea, some way up the mountain, give its interior a gloomy appearance, and afford but inconvenient residences; but its situation is most happy, and a marina, or promenade, which skirts its whole length along the shore, was added by the French, and contributes to render its aspect from the sea extremely imposing. There is no port, though a broken mole, affording protection to the smallest vessels only, offers the semblance of such an accommodation. The principal square has a good public fountain, and is surrounded with several Gothic edifices, including the intendency, the new theatre, and the cathedral. The houses are lofty, and the streets paved with lava. Ancient Gothic walls, in tolerable repair, enclose the city; and on the hill above, amid the principal remains of the ancient *Salernum*, is a ruined citadel. The cathedral, a heavy Gothic structure, is the most interesting of its public edifices. It was erected by the Normans on the site of an ancient building, and is dedicated to St. Matthew, who is said to be buried within its walls. The *atrium*, or court before it, is spacious, and surrounded by a portico of antique columns of porphyry and granite (said to have been brought from *Prestum*, 23 m. SSE., by Robert Guiscard), upon which the Normans constructed a range of brick arches, bent more after the Saracenic than the Gothic or Grecian manner; these support a regular set of apartments. In the centre is a basin of granite, 15 ft. in diameter, constantly filled by a fountain of excellent water. Many sepulchres are placed in the colonnade, and the church contains also monuments of remarkable personages, as Roger and William, dukes of Apulia, Margaret of Durazzo, and the restless pontiff Gregory VII., who died of chagrin at Salerno, in 1085. On each side the entrance of the choir is a pulpit raised upon pillars. Their pannels are formed by rich mosaic of many colours, disposed in knots and stars. The choir is inlaid with square and oval plates of verde-antique, porphyry, and serpentine: the great altar is decorated in the same barbarous but splendid manner. There are numerous other churches, one of which is said, but on doubtful authority, to be the burial place of John of Procida, a native of Salerno, celebrated as the principal contriver of the conspiracy against the French in Sicily, which terminated on the 30th of March, 1282, in the massacre known by the name of the 'Sicilian Vespers.' Salerno has two hospitals, a workhouse, three government pawnbanks, a seminary, a royal lyceum, and a university. To the last belongs a school of medicine, which was once among the most famous in Europe, but which has, for a lengthened period, lost its pre-eminence. But the lyceum in this town is said to be superior to most others in Southern Italy.

Salerno is an archbishop's see, the residence of the provincial intendant, and the seat of a superior criminal court, and of a civil tribunal. Previously to the period when Naples attained to a decided lead among the cities of S. Italy, Salerno carried on a considerable commerce by sea; that, however, has now wholly disappeared, though it continues to possess a pretty extensive inland trade, and has two large annual fairs. Its climate is mild; but it is unhealthy from the proximity of marshes and rice-grounds, the culture of which occupies many of the inhabs.

It is doubtful whether the ancient *Salernum* was contiguous to or at some distance from the sea; but, on the whole, the probability seems to be that it did adjoin the sea, or that it was within such a short distance of it as to justify its being reckoned among maritime towns. (*Cellarii Geo-*

graphia Antiqua, i. 860.) After the fall of the Roman empire, Salerno became the cap. of a flourishing republic, the sovereignty of which was contested by the Greeks, Saracens, Lombards, and Normans; the latter of whom obtained possession of the city in 1076. Having been mostly burned down by the emperor Henry VI., it subsequently became a feudal possession of the Colonna, Orsini, and Sanseverini families, till it was re-annexed to the royal domains by the emperor Charles V.

SALFORD. (See MANCHESTER.)

SALINS, a town of France, *dép. Jura*, cap. cant., in a narrow valley on the *Furiouse*, 26 m. NE. *Lons-le-Saulnier*. Pop. 7,361 in 1861. The town is walled, and commanded by two forts on adjacent heights. Its principal street is paved, and lined with substantial houses. There are several churches, a spacious college, a public library, good barracks, a theatre, hospital, and prison. These buildings are nearly all new, the town having been destroyed by fire in 1825. Salins has several iron-forges, stone works, and brandy distilleries; but its name and principal importance are derived from its brine springs, which were wrought in the time of the Romans. They occupy a large space in the middle of the town, inclosed by turreted walls. The produce amounts to 140,000 cwts. of salt a year; in addition to which a considerable quantity is made at Arc, about 4 leagues distant, to which an aqueduct conducts a portion of the water of the *Salins* springs.

SALISBURY, or NEW SARUM, a city, parl. bor., and market town of England, co. Wilts, of which it is the cap., hund. Underditch, on the Avon, here crossed by three stone bridges (one of which has ten arches), 21 m. W. Winchester, and 80 m. WSW. London, on the London and South Western railway. Pop. of parl. bor., which includes, with the city, the extra-parochial district of the Cathedral Close and parts of pars. Fisherton and Milford, 12,278 in 1861. The city is built with great regularity, having six principal streets running from N. to S., crossed by the same number, intersecting them nearly at right angles. The houses generally are large and respectable; some, also, laying claim to considerable architectural elegance. It is well paved, lighted with gas, and kept remarkably clean by means of brooks running down the middle of the streets. The market place, a large open square on its W. side, has, at its SE. angle, the council house, a brick structure, with a Doric portico, erected at the close of the last century at the expense of the earl of Radnor, and since greatly enlarged. The interior is divided into court-rooms and offices for the business of the assizes, quarter-sessions, and corporation, and it has several good modern portraits. On the opposite side of the market square is a curious old hexagonal-shaped building, having a conical roof supported by pillars; it is called the Poultry or Butter-cross, and was probably built in the reign of Edward III. In another part of the same square is the public library and reading-room, founded in 1819, and supported by subscription. The most striking feature in Salisbury, however, is its cathedral, which stands in the large open space called the Liberty of the Close, on the S. side of the city. The situation is remarkably good; the precinct or close is kept in the best order, and comprises some very fine trees, which, as well as those in the palace grounds, serve to embellish the views of the cathedral. The W. front, the N. side, and the E. end of the latter are all open, and may be seen from peculiarly favourable distances; indeed, the NE. view is perhaps the best general view of a cathedral to be had in England, and displays the various portions of this

interesting edifice, to the best advantage. Salisbury cathedral has the advantage of being built in one style, the early English, and on a uniform and well-arranged plan. The centre tower and spire (the entire height of which is estimated at 404 ft.) are of later date, but admirably accommodated to the style of the building. The plan is that of a complete cathedral, having spacious cloisters, an octangular chapter-house, and a tower for a library and muniment room. There are two transepts, each of which has an aisle eastward; and the nave has a large N. porch. The extreme length of the church (including the Ladye chapel) is estimated at 474 ft.; breadth of nave and aisles, 78 ft.; height of nave, 50 ft.; and width, including the great transepts, 210 ft. Modern alterations have taken away the altar-screen, and thrown the Ladye chapel open to the choir; the organ-screen, also, as well as a large portion of the tabernacle-work in the choir, is of modern construction. The E. window is filled with a beautiful painting on glass of the Resurrection, from the designs of Sir Joshua Reynolds; another window exhibits a painting on glass of the Elevation of the Serpent in the Wilderness. There are other painted windows; and in various parts of the church are several ancient monuments, some of which are extremely curious. The W. front is a beautifully enriched specimen of the pointed architecture peculiar to this church: the angles are terminated by tolerably massive square towers, surmounted by spires and pinnacles; and over the grand central entrance is a series of canopied arches, beneath the great W. window, which is formed in three divisions. The exterior of the church is enriched with a number of recesses situated in tiers at different heights all round the building. Many of the statues still remain, and it is supposed that originally there must have been at least 200. The cloisters are remarkably magnificent, forming an exact square, each side of which is 182 ft. in length. The cathedral library is built over the E. side of the cloisters, and adjoining them, in the same direction, is the chapter-house. 'On the whole,' says Mr. Rickman (*Gothic Architecture*, p. 257), 'the cathedral presents an object for architectural study hardly equalled by any in the kingdom: the purity of its style, and the various modes of adapting that style to the purposes required, deserve the most minute attention.'

Within the close, formerly surrounded by a wall, and still entered by several ancient gates, deserving admiration, are the residences of the bishop, dean, and canons. The deanery-house is opposite the W. front of the cathedral; and at a little distance S.E., surrounded by gardens, is the bishop's palace. A very irregular building, in different styles of architecture, having been enlarged and repaired at various periods, from the middle of the 15th century down to a recent period. The gardens are on a large scale, comprising an area of several acres, well planted with fine, large old trees. The episcopal see was removed from Old Sarum to Salisbury under the authority of a papal bull, in 1217, about which time the cathedral was founded, the expense of its erection, exclusive of the chapter-house, tower, and spire, being estimated at 40,000 marks, or 36,667*l.*, an enormous sum in those days. The chapter comprises (besides the bishop) a dean, precentor, chancellor, and six canons residentiary, dividing among them a net revenue of 2,800*l.* annually, and having residences and separate revenues, with the patronage of 18 benefices. There are likewise 31 prebendaries, besides choral vicars. The bishop has a large portion of the cathedral patronage, besides that of 36 benefices; his diocese

extends over the whole of Wiltshire and a portion of Shropshire. Salisbury has three other churches, one of which, St. Edmund's, is in the gift of the bishop, and that of St. Thomas's in the patronage of the dean and chapter. St. Edmund's is a perpendicular structure, with large windows and good tracery, the chancel having been modernised. The tower fell down, and was rebuilt in the 17th century. St. Thomas's is a large perpendicular church of good composition, with its tower standing on the S. side of the S. aisle: it has a nave and chancel, with aisles and a cleristery. St. Martin's is a large church, in the early English style, with some more recent parts. The church at Fisherton is small and of mixed architecture. The Rom. Catholics have a handsome chapel; and there are places of worship for Independents, Baptists, Wesleyan Methodists, and Unitarians, with attached Sunday schools. A grammar school is attached to the cathedral for the instruction of the choristers, and there is another in the city, founded by Queen Elizabeth, in the patronage of the corporation. The bishop supports a good school; and there is also an orphan school, and the different parishes have their respective national and infant schools. There are several charities, among which may be mentioned that of Bishop Le Poor, near Harnham Bridge; Trinity Hospital, founded in the reign of Richard II., for 12 aged matrons; and Bishop Ward's college for clergymen's widows, with several other almshouses and money charities. An infirmary, founded near Fisherton Bridge in 1786, is liberally supported by subscription; a mendicity society has been established with considerable success, and there are various minor benevolent institutions, bible, and tract societies. A county gaol has been erected in Fisherton, and there is a small, but neat theatre, little patronised, with assembly and concert-rooms.

Salisbury received its first charter from Henry III., which was afterwards renewed by several monarchs. According to the Municipal Reform Act, it is divided into 3 wards, and governed by a mayor, 6 aldermen, and 18 councillors. Quarter and petty sessions are held under a recorder; besides which the assize and quarter sessions for the co. are held here. A court for the recovery of debts to any amount is held monthly by the bishop's bailiff, and it has a county court. Salisbury has returned 2 mems. to the H. of C. since the reign of Edward I., the right of election down to the Reform Act being vested in the corporation. The limits of the parl. bor. were enlarged by the Boundary Act, so as to include, with the old bor., the cathedral close, and certain parts of Fisherton and Milford pars., as before mentioned. Reg. electors 688 in 1865. Salisbury is also the chief election town for the S. division of Wiltshire. Markets on Tuesday and Saturday, with large cattle fairs on alternate Tuesdays. Fairs, Tuesday after Jan. 6; Tuesday after March 25; Whit Monday and Whit Tuesday for horses, and Oct. 29 for butter and cheese.

Salisbury owes its foundation to the removal of the ecclesiastical establishment from the once important but now decayed borough of old Sarum, the Roman station of *Sorbidunum*, about 2 m. N. from the modern city. The quarrels between the troops of Henry II. and Roger Le Poor, the turbulent prelate of that day, induced the latter to establish his clergy in a more peaceful and advantageous situation: a city soon arose round the cathedral, and by the influence of the monarchs and clergy, soon became an important place, while the other fell to decay, and was ultimately deserted by its inhabs. Henry III. granted the city

a charter, entitling it to the same privileges as Winchester, and conferring extensive local powers on the bishop of the see. Parliaments were occasionally held here during the 13th and 14th centuries. The city became celebrated, after the death of Charles I., for the abortive attempt of the royalists under Colonel Wyndham, to proclaim Charles II. Two large monasteries existed here prior to the Reformation, but there are no extant remains of these foundations. Among other distinguished individuals to whom Salisbury has given birth, may be specified James Harris, the author of the 'Hermes,' and of other learned and ingenious philological and metaphysical treatises, born here in 1709. Thomas Chubb, a clever, but not very learned, deistical writer of the last century, was also a native of this city. NW. from Salisbury stretches the vast tract of downs and heaths, called Salisbury Plain; and about 6 m. N. of the city is the stupendous monument of Stonehenge.

SALON, a town of France, *dép.* Bouches du Rhône, *cap. cant.*, in a fertile plain within about 3 m. of the canal *de Craponne*, and 29 m. NNW. Marseilles. Pop. 6,533 in 1861. Salon is divided into an old and a new town, separated from each other by a planted boulevard. It has an air of opulence, of which many larger towns are destitute: its streets are regular, and it has many good houses and public buildings, including a church built by the Templars, the par. church, with several curious sculptures and town-hall. On a rocky height, at the extremity of the town, is an old castle, converted into a house of correction. It has manufactures of silk twist, hats, soap, and olive oil, and a brisk general trade. The remains of a temple in honour of Tiberius have been discovered here.

SALONICA (*an.* *Thessalonica*), a celebrated city and sea-port of European Turkey, *cap. sandjak* of its own name, at the NE. extremity of the gulf of same name, 185 m. NNW. Athens, lat. $40^{\circ} 80' 47''$ N. long. $22^{\circ} 57' 13''$ E. Pop. estimated at 70,000, of whom about three-fifths are Turks, and the rest chiefly Jews and Franks, with a few Greeks. Its appearance, when approached from the gulf is very imposing, as it is seen from a great distance, placed on the acclivity of a steep hill, amid cypress trees and shrubs, surrounded by lofty white-washed walls ascending in a triangular form from the sea, and surmounted by a fortress with seven towers. The domes and minarets of numerous mosques rise from among the other buildings, and, being surrounded with cypresses, give an air of splendour to its exterior. The circ. of the city walls probably exceeds 5 m., but a great part of the space within is void. Its interior presents the same irregularity, and many of the deformities common to Turkish towns; but, on the whole, as respects cleanliness and internal comfort, it may contrast favourably with most other places in Turkey of large size and pop. The houses of the principal inhabs., Greeks and Turks, have here, as in Yammna, small areas connected with them, generally occupied by a few trees. The bazaars at the lower end of the town, are very extensive, forming several long, but narrow streets shaded either by trellises with vines, or by projecting wooden sheds, with branches of trees thrown across. The dealers are principally Greeks and Jews; and the shops are well filled with manufactured goods and colonial produce; but in jewellery, shawls, and the richer articles of oriental dress, they appear inferior. Some of the mosques are worth notice from their size and antiquity, especially two which were formerly Greek churches. Another remarkable edi-

fice, called the Rotunda, after having successively served as a heathen temple and Christian church, has been converted into a mosque: it has evidently been built on the model of the Pantheon at Rome. The cupola is adorned with mosaic work, appearing like eight frontispieces of fine buildings, and in the dome is a circular aperture, as in that of the Pantheon. A fourth mosque has been formed out of a fine temple of the Therman Venus. This was originally a perfect parallelogram, 70 ft. in length, and 38 ft. in width, supported on either side by 12 columns of the Ionic order, of the most exquisite proportions. The Greeks spoiled this beautiful building by endeavouring to make it cruciform, but the six columns of the *pronaos* remain. Among the other ancient structures are two triumphal arches, one of which, now forming a part of the city walls, was erected to Augustus after the battle of Philippi, and the other of brick encased with marble, in honour of Constantine; on the piers of the latter are some fine groups in bas-relief. The Augustan gate, however (now called the Vardar gate, because it leads to the river of that name), is a work of superior taste. Its original height appears to have been 43 ft., but the lower part, to the depth of 27 ft., is below the present surface; the span of the arch is 12 ft., and the masonry is of squared white marble blocks, having inscriptions and appropriate bas-reliefs. In the middle of the city ■ a magnificent ruin, called *Incantadas* by the Spanish Jews resident here, supposed to have been the *propyleum*, or entrance to a circus, consisting of five Corinthian columns, supporting an entablature on which are several figures much defaced, as large ■ life, and still exhibiting the traces of a master's hand. The castle, which forms a large area, separated by a rampart from the city, has lofty and well-built walls, and, at its highest point, stands the fortress surmounted, like that of Constantinople, by seven towers, called by the Turks *Yedi-koule*, and by the Greeks *ἑπτὰ πύργους*. These towers, however, though occupying the site of the old acropolis, are comparatively modern, having been built by the Venetians.

Salonica, during that period of the late war, when the anti-commercial system of Napoleon I. was as its height, became an important depôt for British goods, whence they were conveyed to Germany, Russia, and other parts of Europe. They were transported on pack-horses, by long and laborious journies, into the centre of Europe, through Bosnia into Austria, and through Bulgaria into different parts of Hungary; the time occupied in travelling from Salonica to Vienna being about 35 days. At all times, however, it has had a considerable trade, which, of late years, has rather increased, particularly as regards the importation of British cotton manufactures. The exports principally consist of silk and tobacco, wool, raw cotton, wheat, and other species of grain, linseed and hempseed.

The intercourse with England was ■ few years ago principally carried on through Malta by Maltese or Greek vessels; but the trade is now almost exclusively carried on in English bottoms. Salonica has no port; but there is excellent anchorage in the roads opposite the town, which, from the configuration of the gulf, are nearly landlocked. Accounts are kept in piastres of 40 paras, or 120 aspers, and the coins are similar to those of Constantinople. The weights and measures are the same as those of Smyrna, except that the *kizloz*, or corn measure of Salonica, = $3\frac{7}{8}$ kizloz of Smyrna. The commercial classes consist chiefly of Jews and Franks, the Greek pop. being greatly

diminished since the war of independence. Salonica, however, is a metropolitan see, with 8 attached bishoprics, and there are numerous Greek churches. The Jews form an important section of the pop.: they are chiefly of Spanish descent, and obtain a livelihood by commerce and retail trade in the bazaars, those of the lower orders being employed as porters on the quays or in similar offices. The Franks, most of whom reside in the lower part of the city, consist almost exclusively of French and Germans, who have establishments for the management of the transit trade. The situation is said to be unhealthy, especially in autumn, owing to the vicinity of the marshes at the head of the gulf: intermittent fevers are then exceedingly common, as well as chronic visceral complaints, the result of repeated attacks of those diseases.

Thessalonica was at first an inconsiderable town under the name of *Therma*, by which it was known to Herodotus, Thucydides, and Æschines. Xerxes stayed here some days with his army (Herod. vii. 128), and it was occupied for a short time by the Athenians during the Peloponnesian war. According to Strabo (lib. vii.), Casander changed its name to that of his wife Thessalonica, the daughter of Philip, and sister of Alexander the Great. After the conquest of Macedonia by the Romans it was made the capital of the second of the four districts into which that country was divided; it was the residence of Cicero during a part of the time he continued an exile. Valerian raised it to the rank of a colony; and it had an amphitheatre, a hippodrome, and numerous splendid public buildings. It is also interesting from its connection with the early history of Christianity; having been visited by St. Paul, who made many converts, to whom he addressed the Epistles to the Thessalonians.

SALOP, or **SHROPSHIRE**, an inland co. of England, having N. Denbigh, a detached portion of Flint, and Cheshire, E. Stafford, S. Worcester, Hereford, and Radnor, and W. Montgomery. Area, 826,055 acres, of which about 790,000 are supposed to be arable, meadow, and pasture. Aspect much diversified. No part of the surface is quite flat; but the great plain of Salop, or Shrewsbury, is comparatively level. It extends, lengthwise, from Whitechurch, on the confines of Cheshire, S. to Church Stretton, a distance of about 30 m.; and from Oswestry, on the confines of Denbigh, to Colebrook Dale on the E., about 28 m. The Wrekin hill rises out of this extensive plain on its E. side. The S., or rather the SW. parts of the co., contain several ranges of flattish square-shaped hills, divided by beautiful valleys. Soil various, but generally fertile. In the E. it consists of a red sandy loam, like that of Cheshire; in the S., a mixture of clay and loam is most prevalent; and in the W. there is a good deal of gravelly light soil. The harvest is said to be a fortnight earlier on the E. than on the W. side of the co.; a difference depending partly, no doubt, on the greater elevation of the ground on the W. side; but partly, also, on differences of soil. Salop is principally under tillage; but, in the S. and W. breeding and dairying are carried on to a considerable extent. A good deal of cheese, sold under the name of Cheshire, but inferior to the genuine article, is made in this co. The wool of the hilly tracts used to be of a peculiarly fine quality, but it has deteriorated during the present century in consequence of the efforts of the farmers to increase the size of the sheep and the weight of the fleece. The total stock of sheep in the co. is supposed to exceed 420,000; producing annually about 7,000 packs of wool. Hens are

produced on the borders of Hereford. Property variously divided; some estates being very large, while there are many of very inferior degree of size. On the borders of Wales, farms very small, many not exceeding 20 acres; but on the E. side of the co., in the vicinity of Shifnal, Wellington, and Newport, they vary from 100 to 500 acres or more. The district of Clun Forest, in the SW. part of the co., is divided into small freehold properties, varying in value from 5*l.* to 150*l.* a year, the majority being of the smaller class. Their occupiers, who, in most cases, are also the owners, employ few labourers, the principal part of the work on their farms being executed by themselves and their families. Leases less common now than formerly, and farms generally held from year to year. Agriculture improving; but, owing to the want of leases of a reasonable length, and with proper conditions as to management, it continues to be very defective. The number of corn crops, taken in succession, has been materially diminished since 1820; but two wheat crops still not unfrequently follow each other. These remarks do not, however, apply to the district on the E. side of the co. mentioned above, where the farms are large; for there the tenants are active and enterprising, and agriculture highly improved. Turnips extensively cultivated, and, for the most part, in drills; few oats grown. Cattle of mixed breed, and rather inferior. Pork and bacon much used by the people. Large flocks of turkeys raised by some farmers. Drainage in some places much wanted. Principal mineral products, iron, coal, lead, limestone, and freestone. With the exception of S. Wales, Staffordshire, Lanarkshire, Derbyshire, and Northumberland, more iron is made in this co. than in any other co. of the empire. The furnaces are principally in Colebrook Dale, between Wellington and Willey. Excellent china ware, and a very superior species of pottery, are made at Coalport on the Severn and its vicinity: pipes and nails are made at Broseley; carpets at Bridgnorth; gloves at Ludlow. Some branches of the flannel manufacture are carried on in Shrewsbury and its neighbourhood; but by far the largest portion of the flannel sold in its markets is brought from Merioneth and Denbigh. The Severn, which becomes navigable at Poole, co. Montgomery, traverses this co. in a SE. direction, dividing it into not very unequal portions; and it is besides intersected by very important canals. Roads formerly very bad, but now a good deal improved, though still susceptible of much amelioration. Salop is divided into 15 hundreds, or districts answerable to that denomination, and 216 pars. It returns 11 mems. to the H. of C., viz. 4 for the co., and 2 each for the bors. of Shrewsbury, Bridgnorth, and Wenlock, and 1 for Ludlow. Registered electors for the co., 9,485 in 1865, being 5,315 for the northern and 4,170 for the southern division. At the census of 1861, the co. had 48,391 inhab. houses, and 240,959 inhabitants, while in 1841 Salop had 47,208 inhabited houses, and 239,048 inhabs.

SALSETTE, an island on the W. coast of Hindostan, prov. Arungabad, immediately N. of Bombay island, with which it is connected by a narrow causeway. Length 18 m., with an average breadth of about 13 m. Pop. estimated at 50,000, about 1-5th of whom may be Portuguese Christians. There are two towns on the island, Tannah and Gorabunder; the first being neat and flourishing, with a small fort, several churches, and a considerable British cantonment. The more remote interior parts of the island are inhabited by wild tribes, having no intercourse with the Hindoos of the coast; but who being occupied as harpors of

charcoal, bring it down to particular spots, whence it is carried away by dealers in the article, who deposit in its place a payment, settled by custom, of rice, clothing, and iron tools.

The most remarkable objects of Salsette are the cave-temples of Kennery, among the most noteworthy Buddhist excavation in India. They are of various sizes and forms, being scattered at different elevations over both sides of a high knoll, belonging to a range of hills which divides the island into two nearly equal parts. The largest, and most remarkable cave, bears a great resemblance to that of Carlee (which see), and was converted by the Portuguese into a church. It is entered through a fine and lofty portico in front, a little to the left hand of which is a detached octagonal pillar, surmounted by three lions seated back to back. On either side of the portico is a colossal statue of Budh, nearly 20 ft. in height. The screen which separates the vestibule from the temple has in its centre a large door, above which are three windows in a semicircular arch; elsewhere it is covered with carved figures. The apartment within is 91½ ft. in length, and 38 in breadth, semicircular, and surrounded on every side, but that of the entrance, with a colonnade of octagonal pillars. Of these, 12 on either side nearest the entrance have carved bases and capitals; the rest are not finished in this manner. In the semicircular end is a dome-shaped rock, the *daggos* of Buddhist temples, traditionally said to have once supported the *tee*, or sacred umbrella. The roof, like that of the Carlee temple, is a semicircular arch, supported by slender ribs of teak-wood. The various other caves in this hill are square, or flat-roofed, and attached to many are deep and well-carved cisterns. There are other cave-temples in the island, at the villages of Mompezier, and Ambowlee; and at the former are ruins of a very handsome Portuguese church and Jesuit monastery.

SALTA, a city of S. America, cap. of the prov. of its own name, republic of La Plata, on the high road from Buenos Ayres to Potosi, 820 m. NW. the former city; lat. 24° 30' N., long. 64° 1' 30" W. Pop. from 8,000 to 9,000. The town is situated in the bottom of a valley, through which flow the rivers Arias and Silleta (tributaries of the Salado); the latter of which has, of late years, abandoned its ancient bed, and seems to threaten, at no distant period, to burst over the low marshy grounds upon which the city stands. Its air is unhealthy; but its vicinity abounds with wheat, rye, and cattle, in which, and in salt, wine, hides, and mules, the city has an active trade. It was founded by Don Philip de Lerma in 1582.

SALTASH, ■ decayed bor., market-town, and par. chapelry of England, co. Cornwall, S. div. hund. of East, 17 m. SSE. Launceston, and 4 m. NW. Plymouth. Pop. 1,900 in 1860. The town stands on a steep rock, near the Tamar, from which the principal street runs at right angles, the houses rising one above another to the hill top, on which stands the chapel and town-hall. The latter is supported by pillars, the open space beneath being used for a market. Streets narrow and ill-built; the houses being for the most part, little better than cottages, though chiefly of stone from the rock on which the town stands. The chapel is small; and the living is a curacy subordinate to the vicarage of St. Stephen. There are also two places of worship for Dissenters, with attached Sunday-schools, and a small free-school.

Saltash, which appears to have been formerly of more importance than at present, is principally inhabited by fishermen, or persons connected with

from Plymouth and the surrounding neighbourhood. It is likewise one of the chief entrances into Cornwall from Devonshire, and is approached by a ferry over the Tamar, the revenues of which belong to the corporation. Saltash was made a free bor. in the reign of Henry III., and returned 2 mems. to the H. of C. from the reign of Edward VI. down to the Reform Act, by which it was disfranchised. It was considered of too little importance to be included in the provisions of the Municipal Reform Act. Markets on Saturday: fairs, Feb. 2, July 25, and the Tuesdays before each quarter-day.

SALTCOATS, a sea-port town of Scotland, co. Ayr, partly in the par. of Ardrossan, and partly in that of Stevenston, 24 m. SW. Glasgow, and about 1 m. S. Ardrossan, on the railway from Glasgow to Ardrossan. Pop. 4,778 in 1861. The town has some good houses; but, on the whole, is indifferently and irregularly built, and mean looking. It has a town-house, with a handsome spire, clock, and bell. Its name is derived from the salt works, established in the town for the production of salt, by the evaporation of sea water; but since the repeal of the duty on salt, they have been nearly abandoned. Magnesia, however, still continues to be produced to some extent. The principal dependence of the inhabs. is on the weaving and sewing of muslins, for the Glasgow manufactures. There may, in all, be about 500 looms so employed; principally on lappets, gauzes, shawls, and trimmings. About 80,000 tons of coals are annually shipped here for Belfast and Dublin. A good deal of ship-building was formerly carried on; but latterly it has declined. Two congregations belong to the United Associate Synod, and one to the Relief; and there is a Gaelic chapel. It has a subscription library, a parochial school, a free school, managed by a committee of ladies, and other schools, a savings' bank, and some friendly societies. The harbour is very defective; and in this respect it labours under great disadvantages as compared with Ardrossan.

SALUZZO (Fr. *Saluces*), a city of North Italy, prov. Cuneo, cap. prov., at the foot of the Alps, on an affluent of the Po, 80 miles SSW. Turin, with which it is connected by railway. Pop. 15,814 in 1862. The city consists of two portions, one on the summit and declivity, and the other at the foot of a hill. The upper town is walled, tolerably well built, and has a castle, which was, for three centuries, the residence of the marquises of Saluzzo; one of whom, between 1478 and 1480, constructed the gallery through the Col de Viso. The lower town is the more populous and continues on the increase. The cathedral, a handsome building, is in ■ suburb. Saluzzo has several convents, an intendancy, a court of primary jurisdiction, and ■ royal college. It is ■ bishop's sec. Its chief manufactures comprise silk, leather, hats, and hardware: and it has some trade in wine, corn, and cattle. Under the French, Saluzzo was the cap. of the dep. Stura.

SALZBURG, ■ city of Upper Austria, cap. of the circ., as it formerly was of an archbishopric of the same name, on the Salzach, a tributary of the Inn, 67 m. SW. Linz, and 70 m. ESE. Munich, on the railway from Munich to Vienna. Pop. 17,300 in 1857. The Salzach, which here flows impetuously between two masses of rock, divides the city into two portions, connected by a stone bridge, 370 ft. in length. It is walled, and entered by eight gates; and on ■ lofty point, commanding the town and adjacent country, is the *Hohensalzburg*, formerly the feudal citadel and residence of the prince-archbishops, but now used as a barracks.

chin convent. Owing to the number of its churches, the profusion of marble statues, and flat-roofed houses, Salzburg has the aspect of an Italian city. Generally speaking, the city is dull and gloomy, and its streets narrow, irregular, and grass-grown. The cathedral, constructed in the 17th century, on the plan of St. Peter's at Rome, is large and imposing, and has numerous monuments, sculptures, paintings, and other works of art. It has a fine façade of white marble, occupying the whole side of a public square, with three entrances, flanked by two rows of marble statues. Several of the other churches are highly gilt, and decorated. Monasteries are numerous, but the number of their inmates has been much reduced. In the church of the Benedictine convent is the tomb of Michael Haydn, the musical composer, who, as well as Mozart, was a native of Salzburg. The Mirabel palace is a handsome modern edifice. One of the greatest curiosities in the city is a gateway 420 ft. in length, cut through the solid rock.

Salzburg has a military and three civil hospitals, several charitable institutions, a government pawn-bank, and a prison. It had formerly a university; but this is now reduced to a lyceum of two faculties, medicine and jurisprudence, with a library of 20,000 vols., and probably of 120 MSS., some of the 8th and 9th centuries, a botanic garden, and zoological museum. In the Benedictine convent is another extensive library, with collections of coins. It has, also, a gymnasium, Ursuline female school, a spacious public cemetery, a public museum, and a theatre. Salzburg is still the residence of an archbishop, who has five suffragans; and is the seat of the superior courts for the circle. It has manufactures of cotton yarn, leather, starch, gunpowder, iron wire, and files, and some transit trade, though this has very much diminished. It is well and cheaply supplied with provisions. All travellers agree that it is hardly possible to exaggerate the romantic beauty of the scenery of the neighbourhood.

Salzburg is supposed to occupy the site of the anc. *Juvavia*, destroyed by Atilla in 448. In 803, Charlemagne and the ambassadors of Nicephorus, emperor of the East, met in this town to settle the boundaries of their respective empires. In the 13th century the city became the cap. of a territory, governed by its archbishops till 1802, when it was secularized.

SAMARANG, a town and sea-port of Java, on its N. coast, the cap. of a prov., near the mouth of the river of its own name, 240 m. ESE. Batavia; lat. $6^{\circ} 56' S.$, long. $110^{\circ} 27' E.$ Pop. estim. at 20,000, including many Chinese. It is tolerably well built, and is fortified with ramparts and a wet ditch, capable of resisting a native force. It has many good houses, a large church, town-hall, and hospital, a military school, theatre, and observatory. Before it is a deep morass, and it communicates with the sea only by two raised causeways and the river: it is, however, less unhealthy than the lower parts of Batavia. Provisions are cheap; and near the town are many country houses. The town owes its importance to the industry of the natives in the adjoining districts, who raise large quantities of coffee, pepper, and rice. Many ship-loads of the latter are annually exported to China, and to different countries in the Archipelago. Samarang is the seat of one of the three civil and criminal courts, and courts martial in the island, and the residence of a governor with extensive authority.

SAMARCAND, a city of indep. Tartary, in Bokhara, on the Sogd, or Zer-Afchan, 120 m. E. Bokhara, lat. $39^{\circ} 30' N.$, long. $68^{\circ} 50' 15'' E.$

Pop. about 10,000. The out-works are about 30 m. in circ., enclosing gardens, parks, fields, and extensive suburbs: the inner wall surrounding the city is of earth, and has four gates. Samarcand has the appearance of having been magnificently built; but it is now in a decayed condition, and gardens, fields, and plantations, occupy the place of its numerous streets and mosques. There were formerly upwards of 200 mosques, many of which were of white marble; but most of these have become mere ruins. Of the 40 *medressas*, or Mohammedan colleges, only three are perfect, one of them forming the observatory of the celebrated Ulug Beg being extremely handsome, ornamented with bronze and enamelled bricks. Another college, called Sheredar, is likewise of very beautiful architecture. The tomb of the famous Timour Bec, or Tamerlane, and his family, still remains; and the ashes of the emperor rest beneath a lofty dome, the walls of which are superbly adorned with jasper and agate.

Samarcand has several bazaars, and three large khans, but its commercial importance is all but extinguished; Bokhara having been for many years the great entrepôt of the great caravan traders, as well as the modern capital of the country. The ancient city, however, is still regarded with high veneration by the people, and till a king of Bokhara has annexed Samarcand to his rule, he is not viewed as a legitimate sovereign; indeed, its possession becomes the first object on the demise of one ruler and the accession of another. Paper, made of silk, is said to have been early manufactured at Samarcand; but ordinary paper is now supplied from Russia. The situation of the city has been deservedly praised by Asiatics, since it stands near low hills, in a country elsewhere plain and level. The climate is dry and healthy; good water is supplied from a great number of fountains, communicating by pipes with the river, and the neighbourhood furnishes abundance of fruit, and other supplies for the market.

Samarcand, which was taken in 1220 by Jenghis-khan from the sultan Mahomet, became under Timour the capital of one of the largest empires in the world, and the centre of Asiatic learning and civilization, at the same time that it rose to high distinction on account of its extensive commerce with all parts of Asia. It was reunited to Bokhara by Abdullah at the close of the 16th century, since which it has gradually fallen to its present rank as a mere provincial town; and the traveller may now search in vain for its ancient palaces, the beauty of which is now eulogised by the Arab historians.

SAMBOR, a town of Austria, prov. Galicia, cap. circ. of same name, on the Dniestr, 44 m. SW. Lemberg. Pop. 10,507 in 1857. The town is tolerably well built, and has several R. Catholic and United Greek churches, an hospital, a criminal tribunal, mining court, salt intendancy, and gymnasium. Its inhabs. are employed partly in the manufacture and bleaching of linens, and partly in making salt. Rhubarb is cultivated in the neighbourhood.

SAMOS, a famous island of the Ægean Sea, now belonging to Turkey, off the W. coast of Asia Minor, from which it is separated by the narrow strait called the Little Boghaz, only 2 m. across. It has on the N. the Gulf of Scala Nova, is about 30 m. in length, E. and W., by about 8 or 9 in mean breadth; Mount Kerki, on its W. extremity (an. *Catabates*, from its collecting clouds and generating thunder), being in lat. $37^{\circ} 43' 48'' N.$, long. $26^{\circ} 38' 21'' E.$ Pop. estim. at 50,000. A chain of mountains runs from one extremity of the

island to the other: most of them are covered, as in antiquity, with forests of oak and other timber, though in parts they are precipitous and bare. It has several extensive valleys, especially on its S. shore, which, being well-watered by streams from the hills, produce, even with the most deficient culture, excellent crops of wheat and other grain, with olives, figs, oranges, and other fruits, wine, silk, and cotton. In antiquity it was celebrated for its extraordinary fertility; it was then, also, cultivated with the utmost care, and the walls still exist which were built to form the sides of the mountains into terraces, and to facilitate their culture. It still continues to be the most productive island of the Archipelago. It annually exports considerable quantities of corn; from 25,000 to 30,000 cantars grapes, and about 15,000 barrels raisins. The only thing which Strabo did not admire in Samos was its wine (lib. xiv.); but when properly made, its muscadel is very superior. Oil and valonia are also considerable articles of export. Wolves and other wild animals occasionally commit ravages among the oxen and sheep; poultry are excellent, and partridges exceedingly abundant. Exclusive of marble, it produces iron, lead, and even the precious metals.

Having voluntarily surrendered to the Turks, this island has been less harshly treated by them than most others in the Archipelago. It, however, zealously espoused the cause of the other Greeks during the revolutionary struggle; and, though it was assigned to the sultan by the treaty which recognised the independence of Greece, the inhab. refused at first to submit to his officers. Previously to this event, the government of the island was substantially vested in three primates, chosen by the inhabs. But this would seem to have been no great boon. Besides being oppressed by the agents of the Sultan and the Primates, the island has, also, been harassed by a swarm of Calovers, Papas, and other Greek priests. The present cap. of the island, called Khora, or Megali-khora, is on its S. side, about 2 m. from the sea, on the lower extremities of a mountain, on the ascent of which the citadel of the ancient city was situated. Though not without some good houses, it is a miserable town, having stony, steep, unpaved, and hardly passable streets. Vathi, on the N. side of the island, is larger than Khora, and has an excellent harbour; but it, also, is a wretched place, with streets from 6 to 8 ft. in width, execrably paved and steep.

Samos early attained to great distinction. She was one of the most powerful of the states belonging to the Ionian confederacy; and was able, by means of her fleets, to maintain her independence after Croesus and Cyrus had reduced the states of Ionia, on the Continent. The city of Samos, on the S. shore of the island, was extensive and populous, strongly fortified, and adorned with many noble public buildings. Among the other great works executed by the Samians, Herodotus specifies a tunnel, which they had carried through a mountain, to convey a supply of water to the city; an immense mole, constructed for the security of the harbour (of which the remains still exist), about 120 ft. in height, and which advanced in a curved line about $\frac{1}{2}$ m. into the sea; and the largest temple of which he (Herodotus) had any knowledge. (Herod., lib. iii. cap. 60.)

The temple to which the venerable historian alludes was dedicated to Juno, and stood a little to the W. of the city near the Imbrasus. The island, indeed, was especially sacred to Juno,

says Virgil, speaking of Carthage, where the goddess had also a temple—

Quam Juno fertur terris magis omnibus unam
Posthabita coluisse Samo. —

ÆNEIDOS I. lin. 19.

The statue of the goddess in this temple was very ancient, having been the work of Smilis, a contemporary of Dædalus. Among other statues in and near the temple, were those of Jupiter, Minerva, and Hercules, by Myron, one of the most celebrated sculptors of antiquity. Mark Antony carried off these statues to Rome; but Augustus made those of Minerva and Hercules be returned to Samos, retaining only that of Jupiter. The Hæcean games, instituted in honour of Juno, called by the Greeks Ἡρα, were celebrated here with extraordinary splendour. Like other great temples, that of Juno was an asylum for all who implored the protection of the goddess; and Tacitus notices the arrival of deputies from Samos, at Rome, praying that the *vetustum Asyli jus* might be confirmed. (Annal. iv. cap. 14.) The subsequent history of this famous edifice is but little known. It has, however, fallen a sacrifice to the ravages of time, or of barbarians, or both. When visited by Tournefort, more than a century ago, portions of two columns were all that remained standing. Among other things Samos was famous in antiquity for its pottery, which was everywhere in great request; and the art of manufacturing it is even said to have been discovered in this island.

The government of Samos experienced the mutations common to the governments of most Greek states. Originally it had kings, who were superseded by a mixed government, inclining sometimes to democracy, and sometimes to oligarchy; while occasionally it was subject to tyrants. Of the latter, the most celebrated is Polycrates, who attained to the sovereignty in the 6th century B.C. His object seems to have been to retain the government partly by force, partly by corrupting and reducing the inhabs., and partly by engaging them in schemes of foreign conquest. (Mitsford's Greece, i. 450.) At a period subsequent to the death of Polycrates, who was inveigled and crucified by the satrap of a neighbouring province, the Samians were attacked by the Athenians, under Pericles; who, after an obstinate struggle of nine months' duration, succeeded in reducing their city; and at a somewhat later period it received a colony from Athens. During the contest between Mark Antony and Augustus, Samos was, for a while, the head quarters of the former and of Cleopatra, who kept court here with more than regal magnificence. After Augustus had become the master of the Roman world, he passed a winter in this island, which he restored to its freedom, and at the same time conferred on it other marks of his favour. It afterwards became subject to the Greek emperors; and finally, in the 16th century, to the Turks, under whose brutalising sway it has been reduced to the miserable state in which we now find it.

Of the many illustrious individuals that Samos has produced, Pythagoras is by far the most distinguished. The era of his birth is not quite ascertained, but it appears to have occurred about 580 years B.C. He early visited Egypt and other ancient seats of learning; but, on his return from his travels, being, as is said, dissatisfied with Polycrates, he emigrated to Magna Grecia, and founded at Crotona a school of philosophy, that speedily attained to the highest celebrity. Samos also gave birth to Rhæcus, said by Herodotus to

Anacreon was among the distinguished guests invited.

The narrow strait between Samos and the mainland is famous in ancient history for the great victory gained in it and the adjacent promontory of Mycale, over the fleet and army of Xerxes, on the same day that the forces he had left in Greece, under Mardonius, were destroyed at Plataea.

SANA, a city of Arabia, the cap. of Yemen, and the residence of the Imám, in a valley from 6 to 9 m. in breadth, and 4,000 ft. above the level of the ocean, near the head of the Shabr river, and about 150 m. NNE. Mocha. Pop. estimated at 40,000. The city is walled; as is also its suburb of Bir-el-Azab, which was open in Niebuhr's time. The city and suburb, together, are said to be $5\frac{1}{2}$ m. in circ. The walls are mounted with cannon, but these are in a very bad condition. At both the E. and W. extremities of the city is a castle, having each a palace of the Imám. The streets of Sana are narrow, though broader than those of Mocha, and some other Arabian cities. A handsome stone bridge is thrown across the principal street, down which a stream of water runs in wet weather. Houses principally built of brick, with open holes for windows, closed when necessary by wooden shutters; but some, belonging to the higher classes, have glass windows, beautifully stained. The palaces are built of hewn stone, plastered over with grey-coloured mortar. All the private residences in Sana appear to be furnished with fountains. There are about 20 mosques, very elaborately adorned, many having their domes gilt, especially those in which are the tombs of the Imams. The public baths are both numerous and good: they are on the same plan as those of Egypt, and 'a favourite resort of the merchants, who meet here to discuss the state of trade, and the news of the day over their cup of *keshr*, and their never-failing hookah.' A part of the city is appropriated to the Jews, who amount to about 8,000. Each pays about a dollar a year for permission to reside; and a sheikh is appointed, who is responsible for the regular payment of this impost, and of the heavy taxes laid upon their vineyards and gardens. The Jews subsist chiefly by the sale of silver ornaments, gunpowder, and spirituous liquors, and many by working as common artisans, such as shoemakers. There are also many Hindoos among the population, who, like the Jews, are obliged to conceal as much as possible the property they possess, for fear of exaction. The Mohammedan merchants are generally wealthy, and live in good style. The principal trade in Sana is in coffee, the city being in the heart of the coffee country of Yemen. The article is brought into the market in Dec. and Jan.; and considerable quantities of it are retained in the warehouses. It is, however, little used for home consumption, the favourite beverage being *keshr*, an infusion of the husk. The coffee-husk accordingly fetches here the higher price of the two, from 4 to 12 dollars per 100 lbs. being paid for it. Very fine silk goods are exposed for sale in the bazaars. The imports are principally piece goods and Persian tobacco; with dates, and a great quantity of thread, or rather twist for weaving. Glass is in great request, and is principally supplied from Egypt. The import duties at Sana are so slight as to be almost nominal.

The climate is too dry to be healthy; rain seldom falls, and famine appears to be a frequent result. Some inscriptions, supposed to be in the ancient Himyari character, have been discovered here, but travellers have hitherto found few, or no other antiquities. The greater part of the fortifi-

have been the work of the Turks, who held the sovereignty of the country till about two centuries ago.

SANDWICH, a cinque-port, mun. and parl. bor. of England, co. Kent, lathe St. Augustine, hund. Eastry, on the Stour, about 2 m. from its mouth, 65 m. E. by S. London by road, and 98 m. by South Eastern railway. Pop. of munic. bor. 2,944, and of parl. bor. 13,750 in 1861. The parl. bor. comprises the pars. of Deal and Walmer, and the extra-parochial hamlet of St. Bartholomew, having an aggregate area of 3,810 acres. Sandwich is divided into the three pars. of St. Mary, St. Peter, and St. Clements. It is washed on the NE. by the river Stour, and surrounded on every other side by a dyke, the remains of its old fortification. It is irregularly built, and has a more ancient appearance than, perhaps, any other town in the county. The streets are well paved and lighted, and the inhabs. are supplied with excellent water from the river, and from a spring which rises near the Eastry, and is brought to the town by a canal, 3 m. in length. St. Clement's church is a spacious building, with a massive tower of Norman architecture rising from four semi-circular arches in the centre of the building, and supported on strong piers. In some parts it is curiously ornamented. The living is a vicarage, with a net income of 310*l.* a year. St. Mary's is also a vicarage, worth 117*l.* a year. Both the foregoing pars. are in the gift of the archdeacon of Canterbury. St. Peter's is a rectory, in the gift of the crown and the corporation of Sandwich alternately, worth 144*l.* a year net. There are places of worship for Independents and Wesleyans; two hospitals, one founded in the 12th century, and accommodating 16 residents, who must be freemen; the guildhall, built in 1579, and a new house of correction, comprise most of the remaining public buildings. The free grammar school of Sandwich was founded in the reign of Elizabeth, and received considerable endowments in lands in 1563. Its governors are the mayor and corporation: it has four scholarships in Lincoln College, Oxford, of which two are in the appointment of the governors of the school, and two in that of the rector and fellows of the college; and four in Caius College, Cambridge, nominated in a similar manner. It has, also, a national school and other charities. The town has no manufactures, and its trade is trifling, consisting principally in the importation of coal for the use of the town and neighbouring country. The scheme of straightening the course of the Stour to the sea, so as to form a canal has been abandoned for want of capital and enterprise.

Sandwich was first incorporated by Edward III. Its corporation consists of 4 aldermen and 12 councillors, styled the mayor, jurats, and commonalty of the town and port. Their jurisdiction extends over Ramsgate, Sarr, and Walmer, and did formerly over Deal, which are all members of this cinque port. Sandwich has, however, no commission of the peace, except upon petition or grant. It has sent 2 mems., usually styled barons, to the H. of C., since the 42nd of Edw. III. Previously to the Reform Act, the right of voting was in the freemen, resident and non-resident, the freedom being acquired by birth, gift, marriage, apprenticeship, ownership, and residence. Reg. electors in the new parl. bor., 1,073 in 1865.

Sandwich, formerly called Lundenwick, appears to have risen into consequence, on the decline of Richborough, the an. *Rhutupium*, about the 6th century. It was long a place of considerable trade, and continued, till a comparatively late period, to be a kind of out-port to London, many goods

SANDWICH ISLANDS. (See POLYNESIA.)

SAN FRANCISCO, a city and sea-port of the U. States, in California, on the S. promontory bounding the great bay of San Francisco, inside the bay, and a little to the S. of its entrance from the Pacific, lat. $37^{\circ} 48' 30''$ N. long. $122^{\circ} 27' 23''$ W. Pop. 56,802 in 1860. The growth of this city has been quite extraordinary. In the early part of 1848 it consisted only of a few rude cabins: whereas it has now an exchange, a theatre, a custom-house, many churches, and other public buildings, with great numbers of private houses, many of which are of wood, but many, also, of *adobe* (sun-dried bricks), with a vast number of attached tents and booths. San Francisco is indebted for this transformation to the discovery of the gold deposits in the beds of the tributaries of the San Joaquin and Sacramento rivers, which fall into her bay. Such, however, are the advantages of her situation, and the fertility of the adjacent country, that the exhaustion of the gold deposits, though it might check for a while, would not permanently affect the growth of the city, or the extent of her trade. San Francisco stands on a sandy level; and, during the wet season, when it is most crowded, the streets were, at first, mere puddles, into which carriages sunk to the axles; while, in the dry season, the annoyance from dust was all but intolerable. But these inconveniences have been, to a great extent, obviated by flooring the streets, or covering them with stout planks, a process which has been carried to a great extent, and has had the most complete success. The city has suffered much from fires. These, however, have been speedily repaired; and in a few weeks, no traces are seen of the most destructive conflagrations. According, however, as houses of brick or stone are substituted for those of wood and for tents, fires will become less frequent and less destructive. The pop. of San Francisco is the most motley that can be imagined, for, though Americans predominate, a large admixture is to be seen of adventurers from all parts of the world. Gambling is very prevalent; and is, perhaps, carried on to a greater extent here, during the rainy season, than in any other place either in the new or the old world. But this is the natural result of the circumstances under which the pop. has been brought together; and the passion will, no doubt, abate as the circumstances in which it originated change or lose their influence.

The bay of San Francisco has a narrow entrance, but within it expands into one of the noblest basins that is anywhere to be met with, having a coast-line of about 275 m. The town has already become the seat of a very extensive trade, and will, most likely, be the grand emporium of the vast territory belonging to the U. States on the Pacific. The trade with China, Australia, the Eastern Archipelago, and the Polynesian Islands, is even now considerable, and several ships have been fitted out for the whale fishery.

SANQUHAR, a royal and parl. bor. of Scotland, co. Dumfries, in the valley of the Nith, and near the left bank of that river on the road from Dumfries to Ayr, 26 m. NNW. the former. Pop. 1,754 in 1861. The town consists principally of a main street along the line of the high road. It has a town-hall, with a tower and clock, a handsome par. church, built in 1823, a Free church, 2 chapels in connexion with the Associated Secession Church, and a chapel for Anabaptists; with a parochial and other schools, a subscription library, and a savings' bank. The inhabs. are principally de-

manufacture at Crawick Mill, about 1 m. from the town.

Sanquhar seems to have derived its origin from its fine old castle, now in ruins. This, which formerly belonged to the lords of Sanquhar, having been purchased in 1630, by an ancestor of the last duke of Queensberry, became, on the demise of the latter, with other vast possessions in Dumfriesshire, the property of the family of Buccleugh. It was created a royal bor. in 1596, and is united with Dumfries, Annan, Lochmaben, and Kirkcudbright in sending 1 mem. to the H. of C. Reg. electors, 56 in 1865. Corporation revenue, 1874, in 1863-64.

SANTA CRUZ. (See TENERIFFE.)

SANTANDER (an. *Portus Blendium*), a city and sea-port on the N. coast of Spain, cap. prov. of its own name, on the W. side of the bay of the same name, running into the Bay of Biscay, 50 m. WNW. Bilbao, with which, and Madrid, it is connected by railway. Pop. 24,702 in 1857. The city is built on the slope of a hill, and has wide streets lined with tolerably respectable houses, the principal public edifices being the cathedral, 2 par. churches, and 3 hospitals. It is a thriving town, with a considerable number of new houses, and the chief sea-port of Old Castile, it having been the object of the government for some years to make it one of the principal marts for the supply of Madrid. It has a large trade with Cuba, to which it sends the wheat of Castile, mills being erected in the neighbourhood for converting it into flour previous to embarkation. The exportation of wool is shared with Bilbao; but it has a superiority over that port from its greater proximity to the wool-bearing districts. There are iron mines in the neighbouring mountains, but have been little wrought. The *astillero*, or building establishment of the marine, formerly much employed, is now almost in ruins; and the forests of the Montana, which once supplied Spain with nearly all the timber for the navy, are now seldom used, except for the supply of fuel.

The harbour of Santander is large, well sheltered, easily accessible, and sufficiently deep for all trading vessels. The vicinity produces an abundance of wheat and other grains, fruits of several varieties, and large quantities of cattle; the coast also swarming with salmon and other kinds of fish.

SANTAREM (an. *Prasidium Julium*), a river-port and town of Portugal, formerly the residence of the court, prov. Estremadura, cap. Comarca, on the Tagus, 45 m. NNE. Lisbon. Pop. 8,590 in 1858. The town is built on a hill, and consists of 3 separate parts; the Marivalla on the summit, the Ribera on the E. declivity, and the Alfange on the W. and S., descending to the river's bank, and commanded by the fortress of Alcazaba. Only a few portions of its old walls remain. It is well built, and has some good public edifices; but these are much neglected, and several have almost fallen to ruin since the removal of the court to Lisbon, in the 15th century. Besides numerous churches and convents, Santarem has several hospitals and asylums, and two Latin schools; and it is the seat of the Patriarchal seminary, the highest ecclesiastical establishment in the kingdom. Its environs are fertile and well cultivated, and it has an active trade with Lisbon.

SANTORINI, (an. *Thera*), an island of the Aegean Sea, belonging to the S. Cyclades, 65 m. NNE. from the nearest point of Crete, Mount St. Elias, the highest point of the island, being in lat. $36^{\circ} 29' 45''$ N. long. $25^{\circ} 29' 30''$ E. Pop.

the W., forming a bay, sheltered by the islands Therasia, and Aspronisi. The island has a dismal appearance from the sea, consisting wholly of black volcanic rocks, without wood, rivers, or rivulets; but it has, notwithstanding, some very fertile districts, the decomposed volcanic rocks and ashes supplying a fruitful soil, which being carefully cultivated, produces corn, cotton, and large supplies of wine. The inhab. have no water, other than that which they collect in cisterns; and the calcined rock, being of a light consistency, the houses are rather excavated in it than built. Pyrgos in the centre of the island, near the seat of the ancient Thera, and Scaros, on the coast of the bay, are the only towns of any consequence. The inhab. are very industrious; and have sustained little other inconvenience from the Turkish dominion except that of paying the tribute due to the Porte.

It was the general opinion of the ancients, that this island, and others in its vicinity, had been thrown up from the bottom of the sea; and Pliny says that this event occurred in the 4th year of the 135th Olympiad. (Hist. Nat. lib. ii. cap. 87.) No doubt, however, this date is erroneous; as it appears from Herodotus that the island was inhabited 1,550 years B.C., or 1313 years before the epoch assigned by Pliny for its appearance. (Herod. lib. iv., caps. 147, 148, and 151.) Probably, unless the date given by Pliny be vitiated, he may have referred to some eruption that had occasioned an enlargement of the island. The convulsions of which it was anciently the theatre, have not been suspended in more modern times; a new island having been thrown up near its coast in 1573, and another in 1707, each being preceded by a violent volcanic eruption. In remote antiquity it was called *Calliste*, or the beautiful, an epithet that never could have been applied to it, had its appearance then been at all like that which it now exhibits. The ruins of its ancient city, Thera, on the hill now called St. Elias, evince its extent and magnificence.

SANTOS, a town and sea-port of Brazil, prov. St. Paul, in a low and unhealthy situation on the N. side of the island St. Vincent, 35 m. SSE. St. Paul, lat. $23^{\circ} 56' 15''$ S., long. $46^{\circ} 0' 15''$ W. Pop. estim. at 10,500. Santos is a place of considerable trade, being the storehouse of the great captaincy of S. Paulo, and the resort of many vessels trading to the Rio de la Plata. It is tolerably well built. Several rivulets flowing from the mountains unite in one great river a little above the town. The port is formed by the continent and the island St. Amaro. There are two entrances, but that of the S. is alone navigable by large vessels; the other, which is formed by the river Bertioga, being fit only for small craft. The harbour admits ships of large burden, which are sheltered from all winds except those from the SSW. round to the SE. The part called the Narrows is defended by 2 forts.

Though the commerce of Santos will not bear to be compared with that of Rio or Bahia, it is very considerable. Sugar is the great article of export, but the shipments of it have latterly been decreasing. The imports are similar to those of Rio de Janeiro.

SAONE (HAUTE), a *dép.* of France, reg. E.; between lat. $47^{\circ} 15'$ and 48° N., and long. $5^{\circ} 35'$ and 7° E.; having N. the *dép.* Vosges, E. Haut-Rhin, S. Doubs, and W. Cote-d'Or and Haute-Marne. Length NE. and SW. about 70 m., breadth varying from 25 to 40 m. Area, 533,992 hectares. Pop. 317,183 in 1861. In the N. and E. are the Vosges mountains, and their ramifications. The

Saône traverses the *dép.* throughout its centre. The Oignon forms its SE. boundary. There is a considerable extent of rich soil. The arable lands are supposed to comprise 256,103 hectares, meadows 58,923 do., vineyards 11,769 do., and woods 154,230 do. Agriculture has made some progress within the present century; but it is still very backward. The produce of corn and pulse exceeds the demand for home consumption. Wheat, oats, and barley, are the principal crops. The vineyards form a principal source of wealth. The produce may be estimated at about 350,000 hectol. a year. The wines of Ray, Charicy, Navenne, Quincy, Gy, and Champlitte-le-Chateau, are the best, they have a fine colour, body, and may be kept for a long time. Near the Vosges, large quantities of cherries are grown for the manufacture of *kirschwasser*. Timber is an important product: and the annual produce of wool is estimated at 130,000 kilogr. In minerals, this *dép.* is one of the richest in France. Its iron forges employ about 5,000 hands; and bar iron, iron plates, and wire, steel, and various iron goods are made to the annual value of 14,000,000 fr. Glass and earthenware, cotton goods, paper, and hats, are also produced: the exports are, however, mostly confined to agricultural products, and iron goods. Haute-Saône is subdivided into three arronds.; chief towns, Vesont, the cap. Gray and Lure.

SAONE-ET-LOIRE, a *dép.* of France, reg. E. principally between the 46th and 47th degs. of N. lat., and long. $3^{\circ} 40'$ and $5^{\circ} 30'$ E., having N. Cote d'Or, E. Jura and Ain, S. Rhone and Loire, and W. Allier and Nièvre. Area 856,472 hectares. Pop. 582,137 in 1861. The E. and W. parts of the *dép.* are level; the centre is mountainous, the mountains dividing the basins of the Loire and the Saône. These two rivers are, however, united in this *dép.* by the Canal du Centre. Nearly half the surface consists of a rich and fertile soil. The arable lands are supposed to comprise 456,323 hectares, meadows 126,655 do., vineyards 37,936 do., and woods 150,694 do. The produce of corn exceeds what is required for the consumption of the *dép.*: potatoes form the staple food of the inhab. of the mountains. Some of the vineyards in this *dép.*, especially those in the arrond. of Châlons-sur-Saône, produce wine that ranks in the first class of Burgundy. The wines produced in the other districts are known in commerce by the name of *vins de Mâcon*. They are excellent as *vins ordinaires*, but cannot be compared with the first-rate growths. The produce of wine is estimated at about 500,000 hectol. The arrond. Charolles has some fine pastures: and is supposed to possess 250,000 head of cattle, and 405,000 sheep, being a much larger stock than in any of the neighbouring *deps.* A great number of hogs are reared. Out of 129,312 properties subject to the *contrib. foncière*, 70,987 are assessed at less than 5 fr., 26,208 at from 5 to 10 fr., and 22,347 at from 10 to 20 fr.; and 269 at 1,000 fr. and upwards. Coal, iron, manganese, and marble are raised; the glass and iron works and potteries are important. The commerce of the *dép.* centres principally in Châlons-sur-Saône. This *dép.* is divided into five arronds.; chief towns, Mâcon, the cap., Autun, Charolles, Châlons, and Louhans.

SARAGOSSA, ZARAGOZA (an. *Cæsarea Augusta*), a city of Spain, kingdom of Aragon, prov. of its own name, in a fine plain on the Ebro, crossed here by two bridges, 87 m. SE. Pampeluna, 156 m. W. by N. Barcelona, and 176 m. ENE. Madrid, on the railway from Barcelona to Madrid. Pop. 63,399 in 1857. The limits of the town are

marked by a wall partly of turf and partly of stone, and there are 8 principal and 2 smaller gates. It is divided into 4 quarters and 2 suburbs, comprising upwards of 200 long, narrow, ill-paved streets. There is only one wide street in the whole city, viz. the *Cosso*, which sweeps round the outside circ. of the town on the land side, connecting the market-place and the Ebro. The houses, generally speaking, are of brick, and 3 stories high; but few of them have any pretensions to architectural display. The town has an immense number of churches, two of which are cathedrals. That called *El Asen* is vast, gloomy, and magnificent; the other, called *El Pilar*, is spacious, lofty, light, elegant, and cheerful. This church was nearly destroyed during the siege in 1808-9, and several of the other churches and convents were then also destroyed. The chapter of the united cathedrals comprises an archbishop, dean, 12 dignitaries, and 80 canons. Among the numerous other churches, 16 of which are parochial, that of *Santa Engracia* is worth notice on account of its valuable paintings and sculptures, and the conventual church of St. Domingo, in the *plaza* of the same name, is remarkable for a fine altar-piece and mausoleum of white marble. There are 5 *hospicios*, or public almshouses, one of which, the *Casa de Misericordia*, has accommodation for 700 sick and aged persons of both sexes, and another affords a refuge for upwards of 1,000 orphans and foundlings. The exchange, near the *Puerta del Angel*, is an antique-looking, square building, ornamented with busts of the kings of Aragon, enclosing a spacious hall supported by 50 Doric columns, contiguous to which is the sessions-hall of the *ayuntamiento*. There are two sets of barracks, and in the suburbs are several extensive and well-planted walks. A little W. of the city is the fortress of Aljaferia, so called from its founder, the Moorish king Ben-Aljase, who made it his palace. A university was founded here on the expulsion of the Moors, in 1118, but was not incorporated till 1474: it was well attended at the close of the last century, but is now comparatively deserted. Among the other establishments may be mentioned, a royal economic society, with professors of chemistry and agriculture, botany and rural economy, a royal academy of the fine arts, a public library, and a *monte de piedad*. The manufacturing industry of Saragossa, once very considerable, has all but fallen to decay, the only manufactures at present being those of coarse woollen cloths, parchment, shoes, and leather. The town enjoys also considerable advantages for commerce, owing to its position in the midst of a fertile country, on a main line of railway, and on the canal of Aragon, which runs from near Tudela to Sastago: its trade, however, is confined chiefly to the transport of grain to Tortosa in exchange for articles of home consumption.

The climate is temperate and healthy, though somewhat damp; the neighbourhood produces good crops of wheat, barley, and maize, kidney-beans and other vegetables, wine, oil, fruits, and silk. The neighbouring hills depasture great numbers of sheep, chiefly belonging to the *Canaderos* or sheep-grazers of Saragossa, an old and highly privileged association.

Saragossa is very ancient, being said to have been founded by the Phœnicians or Carthaginians. It was greatly enlarged by Julius Cæsar, who made it the head quarters of the veteran legion; and Augustus gave it the name of *Cæsarea Augusta*, with the privileges of a free colony. Of its Roman buildings, however, which, according to Strabo, must have been numerous and handsome,

of the 5th century it was taken by the Goths, who were expelled in 712 by the Saracens; and at length, in 1017, it was made the cap. of a separate Moorish state. A century afterwards it was besieged and taken by Alphonso of Aragon, and it was subsequently united to the kingdom of Castile. But it is principally known in modern history from the obstinate resistance made by its inhabs., under Palafox, in 1808-9 to the French, commanded successively by Marshals Mortier and Lannes. The siege lasted, with some slight intermissions, from July 15, 1808, to Feb. 21, 1809, when, after a loss of about 6,000 men killed in battle, and of above 30,000 men, women, and children carried off by hunger, pestilence, and the fanatical excesses that raged in the unfortunate city, it surrendered to the French. General Napier's account of this famous siege has stripped it of more than half the romance with which it was early invested in this country. The 'heroic' Palafox 'for more than a month preceding the surrender never came forth of a vaulted building which was impervious to shells, and in which, there is too much reason to believe, that he and others, of both sexes, lived in a state of sensuality, forming a disgusting contrast to the wretchedness that surrounded them.' (Napier, ii. 49, 8d edit.) In obstinacy, fanaticism, and savage cruelty, the Saragossans seem to have borne a striking resemblance to the Jews besieged by Titus. The loss of the French in the siege did not exceed 4,000 men.

SARANSK, a town of European Russia, gov. and dist. Penza, on both sides the Saranga near the Insar, 70 m. N. by E. Penza. Pop. 11,864 in 1858. Most of its houses are of wood: it has, however, two cathedrals, nearly a dozen other churches, a convent, various manufacturing establishments, and a large annual fair.

SARATOF, an extensive government of European Russia, between the 48th and 53rd degs. N. lat., and the 42d and 50th E. long., having N. the govs. of Penza and Simbirk, E. that of Orenbourg, SE. and S. Astrakhan, and W. Tambov, Voroneje, and the country of the Don Cossacks. Length and greatest breadth about 350 m. each. Area estimated at about 73,600 sq. m. Pop. 1,636,155 in 1858. The Wolga intersects it from N. to S., dividing it into two portions of nearly equal size, but differing considerably in general character. The E. division is a wide steppe, destitute of wood, and covered in many parts with salt lakes, from one of which 10,000,000 poods of salt are said to be annually obtained. The W. division is in part hilly, and though stony towards the S., has some tolerably fertile tracts in the N., where agriculture is the chief occupation of the inhabitants. Rye, wheat, oats, millet, and peas are raised, and in ordinary years the produce, after supplying the demand for home consumption, leaves a considerable quantity for exportation. Potatoes, flax, and hemp are also produced, and the cultivation of tobacco, hops, and wood has been introduced by German and other colonists. The climate, in some situations, is sufficiently mild for the culture of the melon, grape, and mulberry. The principal forest trees are oaks, poplars, Siberian acacias, and firs. The woods are mostly in the NW., and those belonging to the crown are estimated at about 418,500 deciatines; but the supply of timber is not adequate to the home demand. The rearing of live stock is conducted on a large scale, and the more wealthy proprietors are endeavouring to improve the breed of sheep, by the introduction of Merino flocks. The rearing of bees and of silkworms is on the increase. The fisheries in the

consumption and exportation. Next to salt, mill-stones and a little iron are the chief mineral products.

The population is very mixed, including Tartars and Kirghizes, and on the Wolga are numerous colonies, founded principally by German and other immigrants from W. Europe, originally attracted thither by grants of land, and privileges conferred by the empress Catharine, in 1763. The colonists are free, and in most respects subject only to their own jurisdiction. They conduct the most important manufactures of the government, which consist of linen, cotton, and woollen fabrics, hosiery, iron ware, leather, and earthenware. There are numerous flour-mills and distilleries. This government is favourably situated for commerce: it communicates by the Wolga with the Nijni-Novgorod and the Caspian Sea, and by the Medveditza and Don, with the Sea of Azof. The Tartars have a large trade in sheepskins, and the Kalmucks in horses of a very fleet, though weak breed. Saratof is divided into 10 districts; chief towns, Saratof, Volsk, and Tzaritsyne. The population are mostly divided among the Greek, Protestant, and Mohammedan religions.

SARATOF, ■ town of Russia in Europe, cap. of the above gov., on the Wolga, 335 m. SSE. Nijni-Novgorod, and 860 m. NNW. Astrakhan. Pop. 61,610 in 1858. Saratof consists of an upper and lower town, but, though founded so late as 1665, it is neither regularly laid out or well built. It has some good and even handsome stone residences; but most of its houses are of wood, and it has frequently been in great part destroyed by fire. There are about a dozen Greek-Russian churches, some convents, a Protestant and a R. Catholic church, a mosque, and a *gostinõi-duor*, or bazaar, a large stone building for the warehousing, exhibition, and sale of merchandise. Since 1838, a new and handsome archbishop's palace has been constructed; and there are several hospitals, a gymnasium, and an ecclesiastical seminary, established in 1828, and having at present about 500 students. The inhabs. manufacture cotton fabrics, cotton and silk stockings, clocks and watches, leather, wax lights, tallow, and vinegar. Saratof, which is intermediate between Astrakhan, on one hand, and Moscow Nijni-Novgorod on others, has an extensive trade, its exports being principally corn, salt fish, hides, cattle, and native manufactured goods; and its imports tea, coffee, sugar, iron, glass, and earthenware, woollen, silk, and cotton stuffs. It has three large annual fairs.

SARATOGA SPRINGS, a famous watering place of the U. States, in the state of New York, co. Saratoga, 34 m. NNW. Albany. Resident pop. 4,895 in 1860. This incorporated village consists of a fine broad street fringed with trees, and has many large and excellent hotels, a Presbyterian church, post office, and numerous boarding houses. The springs, which came into repute through the Indians in 1767, are spread over a tract 12 m. across. Congress-spring, the most celebrated, was discovered in 1792. A gallon of its water holds in solution 385 grains of sea-salt; 3.5 do. hydriodate of soda; 8.982 do. bi-carbonate soda; 95.788 do. bi-carbonate magnesia; 98 do. carbonate lime; 5 do. carbonate iron; and 1.5 do. silex. Above 1,500 people have been known to arrive here in a week, coming from all parts of the states, even from New Orleans, a distance of between 2,000 and 3,000 m., during the unhealthy season in the S. States. A very profitable trade is carried on by the proprietors of the several springs in the water, which is bottled and sent to distant parts. The spring water loses its pun-

gency, however, and its iron ■ entirely deposited, by its being too long kept in bottles.

The vicinity of Saratoga is interesting, from its being the scene of one of the leading events in the war of independence, the surrender of General Burgoyne, and the British troops under his command, to General Gates, 17th Oct., 1777.

SARDINIA (Ital. *Sardegna*, Fr. *Sardaigne*, an. *Ichusa*, from its resemblance to the print of a foot, *post Sardinia*), an island of Italy, and next to Sicily, which it nearly equals in size, the largest in the Mediterranean. It lies principally between the 39th and 41st degs. of N. lat., and the 8th and 10th of E. long., being separated from Corsica on the N. by the Strait of Bonifacio. It is of an oblong form; length, N. and S., about 160 m.; average breadth, about 60 m.; area with its dependent islands, 9,240 sq. m. Pop. 578,115 in 1862.

Sardinia differs from Corsica in being more diversified, more fertile, and richer in minerals. A large proportion of the surface is hilly or mountainous. The principal mountain chains extend from N. to S. at no great distance from the E. coast; but in various parts of the island there are ranges of considerable length stretching in an opposite direction. The general elevation of the mountains is from 1,000 to 3,000 ft.; the peak of Limbarra, however, is 3,686 ft., and that of Genargentu, in the chain of that name (the *Innumi Montes* of antiquity), 5,276 ft. in height, an altitude which enables the people of Aritzu to trade in snow for the consumption of the capital.

There are many extensive plains, the principal being those of Ozieri and Sassari in the N., that watered by the Tirsi in the centre, and the *Campidano*, between Oristano and Cagliari, in the S. The Tirsi, Fimondoso, Coguinias, and Mannu, flowing through these plains, are considerable rivers: the minor *campi* are watered by numerous small streams. Around the coasts are many lagoons, and several considerable bays, as those of Cagliari, Oristano, Sassari, and Orisel.

The mountain-chains of Sardinia and Corsica have a similar formation, being composed of granite, schist, and primitive limestone. Through the centre of Sardinia, from N. to S., extends a remarkable tertiary formation of a calcareous nature, and various volcanic products are scattered over this formation, while the traces of extinct craters are visible in many parts of the island. Earthquakes, however, are rare; nor are storms frequent, though the climate is proverbially variable as to temperature. The mean temperature of the year, at the level of the sea, may be taken at 61.7 Fah., and the medium height of the barometer at 29.69. Extensive districts are very unhealthy, and in antiquity the island was celebrated alike for the excellence of its soil and the badness of its air. '*Sardinia fertilis, et soli quam cali melioris; atque ut fecunda, ita pene pestilens.*' (Pomp. Mela, lib. ii. cap. 7.) The *intemperie*, as the malaria is here called, appears to be somewhat different from the *malaria* of Italy and Sicily; for though equally, or even more acrimonious in effect, it does not always produce the swelled bodies and sallow skins which are the symptoms of the latter. Both diseases usually commence when the summer heat, assisted by light showers, disengages the impure gases from the low grounds, and continue until the latter end of November, when heavy rains have precipitated the miasma, and purified the air. But they differ, inasmuch as malaria is generally supposed to be weak in its effects unless imbibed during sleep; whereas *intemperie*, though worst at night, is pernicious at all times. The chief source of insalubrity appears

to consist in the exhalations from the numerous marshes and stagnant pools of the plains, and might, therefore, it may be fairly concluded, be greatly abated by a proper system of drainage. Fire is said to be a powerful antidote against the evil; and the lords of Oristano were formerly accustomed to light large fires round the town, which had the effect either of rarefying or destroying the mephitic vapours.

Notwithstanding her extent, the richness of her soil, her position in the centre of the Mediterranean, and her convenient harbours, Sardinia has been strangely neglected, not only by her own governments, but by the European powers generally, and has remained, down to our own times, in a semi-barbarous state. A long series of wars and revolutions, followed by the establishment of the feudal system in its most vexatious and oppressive form; the fact of her having been for a lengthened period a dependency of Spain, and, if that were possible, worse governed even than the dominant country; the division of the island into immense estates, most of which were acquired by Spanish grandees; the want of leases, and the restrictions on industry, have paralysed the industry of the inhabs., and sunk them to the lowest point in the scale of civilisation. Since 1750, however, improvements of various kinds have been slowly, but gradually gaining ground; and, within the last few years, several important and substantial reforms have been introduced, that will, it is to be hoped, conspire to raise this fine island from the abyss into which it has been cast by bad laws and bad government.

Besides that portion of the island occupied by lakes and marshes, there are large sandy or stony districts, called *macchie*, which comprise, in the aggregate, more than one-third part of the island. A similar extent may be assigned to forests and pastures; the remaining portion of the surface being laid out in corn-fields, vineyards, olive-grounds, orchards, and gardens. About one-fifth part of the cultivated land is supposed to be allotted to the growth of corn, which, even under the present system of agriculture, is said to give a return of 7 or 8 for 1; and, in some favoured districts, the average is said to amount from 16 to 50 for 1. Of the capacity of the island for producing the most luxuriant crops of corn, there can, indeed, be no doubt. In antiquity, Sardinia was reckoned, along with Sicily, a granary of Rome. '*Siciliam et Sardiniam benignissimas urbis nostræ nutrices.*' (Val. Max., lib. vi. cap. 6.)

'Utraque frugiferis est insula nobilis arvis,
Nec plus Hesperiam longinquis messibus ullæ,
Nec Romana magis complerunt horrea terræ.'
Lucan, iii. lin. 65.

But the unfavourable political and municipal regulations under which the island has been placed, have gone far to neutralise the advantages it owes to nature.

The agriculturists of Sardinia principally consist of two great classes—those who cultivate small farms on the *métayer* principle, and those who work on the estates of others, getting, in most instances, a patch of land for their support, and cultivating it at such times as they are not employed on the lord's lands. Both classes are excessively poor. The agreements under which the former class holds are seldom for more than a year; the landlord furnishing the seed as well as the land, and receiving half the produce. Those who occupy land for which they are obliged to pay a rent in *corvées*, or other feudal services,

the *Monti Frumentarii* established for that purpose, and having also to defray the tithe and a host of other burdens. Another disadvantage, under which all classes labour, is the want of houses on their farms: the peasants live together in villages, and have frequently to perform a journey of several miles in going to and coming from their farms. Probably, also, this may, in some degree, account for the frequent change of occupancies by the Sardinian peasants; though, as Marmora has truly observed, their circumstances be rarely improved by such changes. Lands belonging to a canton or commune are frequently cultivated on a kind of partnership system, being divided into three portions: one of these, called *vidazzone*, comprises all the lands that are in cultivation, and which are distributed by lot among certain individuals, while the other two portions are occupied in common as pasture. But, as a new distribution takes place every year, it is plain that no individual can take any interest in the improvement of the soil; and this sort of tenure becomes, in fact, the most effectual that can be devised for the extinction of industry. Latterly, however, the government has been making efforts to promote the formation of inclosures and the division of the lands, which, though opposed by the prejudices of the people, have made some progress.

The culture of the vine is gradually increasing in importance, and about 8,500 Catalan pipes are exported, chiefly from Alghero and Ogliastro. Olive oil, owing to the little care taken in its preparation, and its consequent bad quality, has hitherto been but little exported; but it is susceptible of an indefinite increase, and might be made an important article. Tobacco is a royal monopoly. Flax, linseed, saffron, hemp, and barilla are grown to some extent: silk is produced only in limited quantities, but its produce might, no doubt, be vastly increased; some cotton is produced, and also small quantities of madder, which last grows wild in the island. The mountains are clothed with forests of oak, beech, chestnut, and other timber; but, from the want of roads, these are nearly useless. The agricultural implements and processes are excessively rude. The Sardinian plough, the counterpart of that described by Virgil, does little more than scratch the ground. It is without a coulter, and is very frequently wholly constructed of wood. Oxen only are used in ploughing and other field labour. Most of the garden grounds are wrought by the hoe, the spade and mattock being unknown, except to the Piedmontese labourers on the new roads. The corn is left in the fields till it be thrashed, an operation effected by the primitive practice of treading with horses and oxen.

The greater number of the oxen, horses, and other live-stock, wander wild over the island, bearing the mark of their owners, and browsing in the woods in winter, there being no wolves. They are generally, as might be expected, very inferior; but considerable pains are taken in the breeding of some descriptions of horses, and horse-races are a prevalent amusement. It is singular, notwithstanding the badness of the roads, that mules should be unknown. The Sardinian sheep is said to be remarkable only for its degeneracy: its wool is of a very low quality, and is worth little. Cheese, made of the milk of sheep and goats, is extensively exported; but this is a result, not of the goodness of the milk, but of its extensive supply, arising from the great number of these animals, there being about 800,000 sheep, and 550,000 goats.

lib. xxxviii. cap. 9), whence some naturalists suppose the sheep to be derived, is a native of Sardinia. It is a ruminating animal, frequenting only the highest and most secluded woods; where, from its timidity and fleetness, it is with difficulty shot. The form of the ears, head, legs, and hoof, identify the moufflon with the sheep, though in size it is rather larger, and is, moreover, clothed with hair instead of wool. The horns are neither full nor deciduous, but hollow, and precisely similar to those of the ram, while the bleat is the same: it propagates also very readily with the sheep, the mixed produce being the 'umbro.' Though so shy in its wild state, the moufflon soon accommodates itself to domestic habits. Deer, wild boars, and a variety of game, abound in the forests; and the skins of about 60,000 rabbits and hares, from 4,000 to 5,000 foxes, and 2,000 martins, are annually exported, besides 5,000 cantars of *carnucci*, or dried skins, for making glue.

Though various improvements have been effected of late years, it is still true that the interior of this island exhibits, at this moment, a degree of barbarism which can with difficulty be believed to exist in Europe. The shepherds, and others who occupy the mountainous parts of the island, are in the habit of wearing only coverings of tanned leather, or of shaggy goat or sheep skins. They are constantly armed to protect themselves from banditti; roaming with their flocks over the uninhabited tracks, enjoying a bare subsistence, and acquainted with no laws but those of their own formation. They sometimes sow small patches of wheat and barley round their temporary dwellings; but they subsist chiefly on fruit, game, and the produce of their flocks, each family constituting as it were a patriarchal association. Though this part of the pop. be inoffensive, the number of banditti in the mountains formerly rendered it unsafe for any one, whether a foreigner or a Sardinian, to venture far into the interior without an escort; and the farmers in the plains have been accustomed to rely for protection from the depredations of their highland neighbours on a long established corps, called the *barancelli*. This is an armed association, chosen annually in the village districts; the members of which are bound to make restitution for all thefts, provided they receive immediate intimation of the robbery. Their remuneration arises from an annual sum subscribed by every landholder. An attempt was made by the government, in 1819, to disband this force, but it was unsuccessful; and, on the whole, the *barancelli* are well adapted to the condition of the country.

The banditti that have long infested and still continue to infest parts of this island, owe their origin to a variety of causes, among which, no doubt, may be included the influence of the feudal system, and the opportunities afforded by the state of the country, full of natural fastnesses, without roads, and without an efficient system of police, for their carrying on their depredations with impunity. Latterly, however, some stringent measures have been adopted for their suppression. The privileges of sanctuaries have been in most instances abolished. Roads have been made into districts that were previously inaccessible; the right to wear arms has been restricted; and these measures, combined with the abolition of the feudal system, and the establishment of royal courts for the speedy and more equal distribution of justice, will, probably in no very lengthened period, go far to suppress the robberies and assassinations which have so long disgraced the island.

The houses of the peasantry are most wretched,

consisting usually of only one story without windows; or, if there be windows, they are not glazed. A whole family frequently dwells in a single room, in which kids, chickens, and dogs seek indiscriminate accommodation with the naked children; whilst an ass is usually employed turning a corn mill (*mola asinaria*) in the corner. The centre of the room has a square hole in the clay floor, for the fire, but there is no outlet for the smoke except accidental holes in the roof or door. A few small low chairs, with an equally low table, constitute the usual movables. Earthenware not being common, the ordinary substitute is an oblong wooden dish. More flesh is used than in Sicily, but less polenta. Omelettes of curds and raw vegetables are favourite articles of diet.

The towns and villages are mostly large and well situated, but with unpaved, narrow streets, mean houses, and a want of every convenience. Immense dunghills, the collection of ages, disfigure the principal entrances. In the N. half of the island the villages are constructed of freestone or granite, but most of the country houses in the S. are built with sun-dried bricks made of mud and straw. In the towns some good mansions are met with, though they are ill fitted up, and their *atria* generally as dirty as those of the ancients in the days of Juvenal.

The fish on the coasts and in the harbours of Sardinia are mostly caught by foreigners. Pilchards have become rare. The lagoons of Oristano and Cagliari abound with fine mullet, bream, and eels. From 200 to 300 boats used to arrive every year from Naples and Genoa to the coral fisheries on the coasts; but these have latterly been decreasing, owing to the vexatious custom-house regulations imposed on the coral boats.

Sardinia has ores of silver, copper, lead, and iron, which, if wrought, would, it is believed, be among the most valuable of her resources. Salt is a royal monopoly, and affords a considerable revenue. Until recently, Sweden drew almost all her supplies of this article from Sardinia; and it continues to be exported in considerable quantities. It is obtained by natural evaporation, principally near Cagliari.

Except the royal gunpowder, salt, and tobacco manufactories, a few for cotton, woollen, and silk goods, and some coarse pottery and glass works, Sardinia has no manufacturing establishments. Very little skill is shown by any of the artisans; and watches, clocks, and even coarse cutlery are all imported. The want of roads has hitherto proved a serious obstacle to manufactures, as well as to every other branch of industry. A good road, practicable for wheel carriages, has, however, been formed within recent years from Cagliari to Sassari; and cross roads are being carried from it to some of the most considerable places in the island. More important still is a great line of railway, running from Cagliari to Oristano, and from thence along the west coast to Sassari, which has been in progress since 1861, but will, probably, not be finished till 1868 or 1869. The execution of this railway must be of the greatest advantage to trade and commerce. Till within the last twenty years, scarcely any roads were passable for travellers, except on horseback or on oxen, the *lettiga* of Sicily being unknown. A cart for luggage was indeed used; but this vehicle was a mere ladder mounted on solid wheels fixed to the axletree, and stuck round the edge with triangular nails, being a ruder machine than any seen in Spain, Greece, or Calabria.

The commerce of Sardinia has long been stationary, but of late has somewhat improved. The subjoined table gives the total value of the imports

and exports of the island in each of the years 1860, 1861, and 1862.

| Years | Imports | Exports |
|-------|-----------|---------|
| | £ | £ |
| 1860 | 673,908 | 674,633 |
| 1861 | 1,047,075 | 766,622 |
| 1862 | 780,076 | 631,674 |

Accounts are kept in lire, soldi, and denari: the lira of 20 soldi and 12 denari=about 1s. 6d.; the real of 5 soldi= $4\frac{1}{2}$ d.; the scudo of 10 reali=3s. 9d. The Sardinian lb. of 12 oz.=14 oz. 5 dr. avoird.; the rubbo=26 lbs.; the moggio or starello (of corn)=about 1 bush. 1 peck. The palmo= $10\frac{1}{2}$ Eng. inches; the starello or moggio (of land) of Cagliari=3 roods 27 poles 19 yards; of Sassari=1 rood 38 poles 24 yards.

Sardinia has a governor, who is the chief of the civil and judiciary administrations, and the commander of the forces both by land and sea. The island is subdivided into the provinces of Cagliari, Sassari, and Nuovo, and subdivided into districts and communes. The seven cities or principal towns are under the administration of the magistrati, municipal bodies, each composed of six mems. Each commune has a council of three, five, or seven mems., presided over by a sindaco. The Udienza Reale, created in 1661, and reformed in 1823, is the highest tribunal in the island. It is composed of thirteen judges and two presidents, and is divided into three chambers, two civil and one criminal; and has at its head the regent, the first functionary in the island after the viceroy. Besides its functions as a supreme judiciary court, it participates in the legislative power, the decree of the viceroy, published with the concurrence of the Udienza Reale, having the force of laws. Sassari has a tribunal resembling the Udienza Reale of Cagliari, to which appeals may be made from its decisions. In the two cities last named are tribunals of commerce. In the provinces justice is administered by prefects, whose decisions are final in civil causes to the amount of 10 scudi, and who have primary jurisdiction in criminal cases. The *curie*, or district tribunals, have a very limited jurisdiction.

Sardinia has a local parliament, called the *Stamenti*, consisting of three chambers; the ecclesiastical, selected from the prelates; the military chamber, comprising all the nobles 20 years of age, with or without fiefs; and the royal chamber, composed of the deputies of the towns and communes under the *capo giurato* of the capital. The stamenti are convoked and holden during the king's pleasure, but meet only on extraordinary occasions. Each section holds its sittings apart; and, after separately discussing the matter under debate, they communicate by deputies. The deliberations of the ecclesiastical body, respecting donations, must be submitted to the king for his approval, before passing into a law. The supreme council of Sardinia has its seat in Turin: it is composed of a president and five councillor-senators, and is similar to the ancient supreme council of Aragon. Beyond this tribunal there is no appeal, and it gives its opinion in all state affairs transmitted to it from the government of the island.

The laws of Sardinia are partly composed in the code entitled the *Carta de Logu*, promulgated in 1395, and said to be drawn up, considering the period when it was issued, with great discretion.

of Savoy, and the *pregoni* or decrees of the viceroys. In consequence of the numerous and, in many instances, conflicting enactments that have thus been issued, the law has become exceedingly obscure. This encourages litigation, and recourse is had to the courts to determine the most trifling questions; and unfortunately the means of legal redress are at once tedious, expensive, and uncertain. 'The country judges,' says a traveller, 'are extremely poor; and venality is so common, that sentences are just and equitable only when the government takes a criminal matter in hand. This is one of the leading causes of the assassinations that have so stigmatised the island. It is an acknowledged difficult task to work a reform in detail; for if a magistrate prove himself more than usually active in his office, he is sure to receive the vengeance of adverse partisans; and the effect of the whole system and practice is a melancholy want of security both of persons and property.'

According to Captain Smyth (Sardinia, p. 141), there is a striking resemblance between the Sards and Greeks. 'It is impossible,' he says, 'for any one who has travelled in Greece, not to be struck with the similarity which, in many points, exists between the Sards and the Greeks. Not only are their arms, music, dances, dresses, and manners in close resemblance, but many of their words and superstitions are exactly the same; so that the opportunities I have had of comparing the two nations, would lead me to infer the partial identity of their origin. The Sards are of a middle stature and well-shaped, with dark eyes and coarse black hair; except in the mountains, where fresh complexions and blue eyes are met with. They have strong intellectual faculties, though uncultivated, and an enthusiastic attachment to their country. They are active, when excited, but extremely indolent in general. Their good qualities are counterbalanced by cunning, dissimulation, and an insatiable thirst for revenge.'

Though vassals in Sardinia could change their lord and residence at will, the degrading services and tenures of feudalism were in full vigour in most parts of the island down to its abolition in 1839. The dependence of a peasant on his lord commenced when he was deemed capable of earning his bread; and an annual tribute, either in money or kind, was exacted from all above the age of 18; and this, in addition to the usual imposts on lands and stock; the contributions demanded for prisons, robberies, arson, and exemptions from the *roadia*, or one day's personal labour, as well as from other dominical services. These feudal burdens, with tithes, taxes payable to the king, alms, as they are called, to mendicant monks, and other grinding extortions, amounted, in many instances, to nearly 70 per cent. of the earnings of the peasant. And if, to this amount of taxation, be added the vicious customs that prevailed in the letting of land, unintelligible laws, and venal judges, need we wonder at the poverty and semi-barbarism of the peasants, and that revenge has become, in their estimation, a sacred duty.

The Sards are enthusiastically fond of poetry, but the other fine arts have met with no encouragement: and there is not a native planter, sculptor, or engraver, of any eminence in the island. The language of Sardinia is that dialect of the Italian which preserves the greatest portion of Latin.

There exists little authentic information respecting the history of this island previously to its conquest by the Christians, from whom it was

sively possessed by the Vandals, the Goths, the emperors of the East, and the Moors; from whom it was taken, in 1022, by the Genoese and Pisans. It continued to be a subject of contention between these rival nations till 1325, when it was taken possession of by the kings of Aragon, and it remained attached to the Spanish monarchy till 1714, when, by the peace of Utrecht, it was ceded to Austria. In 1720, the latter exchanged it for Sicily with Victor Amadeus of Savoy. Previously to the French Revolution, the Sardinian government is said to have been desirous to sell the island to the empress of Russia for 1,000,000*l.* sterling; but the scheme was defeated by the interference of France and Spain. (Young's Travels, ii. 256.) It was unsuccessfully attacked by the French in 1793; and on the seizure by the latter of the continental portion of the Sardinian dominions, Cagliari became the residence of the royal family. Recently, as already stated, measures which promise to be of the utmost importance to the island, have received the sanction of the government.

SARDINIA, a former independent kingdom, and now a portion of the kingdom of Italy, comprising the whole of N. Italy W. of the Tessino, including Piedmont, Genoa, and part of Nice, with the island of Sardinia in the Mediterranean, the whole of these dominions being situated between the 39th and 46th degs. of N. lat., and the 5th and 10th of E. long. The territory is at present divided into the provinces of Alessandria, pop. 687,629, in 1862; Cuneo, pop. 607,111; Genoa, pop. 643,580; Novara, 578,392; Porto Maurizio, 121,020; and Turin, pop. 924,209 in 1862.

The Alps separate this territory into two great divisions: Piedmont in the centre, distinguished by the Romans as 'Gallia Transpadana,' forming the upper part of the valley of the Po; and the prov. of Genoa, the ancient 'Liguria,' in the S. between the Maritime Alps and Apennines, and the sea. The most valuable portion is the plain of Piedmont, extending from the foot of the Alps to that of the Apennines on the S., and to the Tessino on the E. The soil is everywhere a rich, sandy loam, with little appearance of clay, and of great fertility. Owing to the heat of the climate in summer, water is here the great desideratum; and advantage has accordingly been taken of the numerous streams that pour down from the mountains, which are distributed with infinite skill all over the low grounds. Nowhere, indeed, is the art of irrigation carried to greater perfection than in that part of the great plain of the Po included in Piedmont. The irrigated lands, being under the influence of a southern sun, produce the most luxuriant crops. Lands in Piedmont are mostly inclosed, generally by ditches, but, in many parts, with hedges also, which in some districts equal those in the best English cos. The crops, however, are generally divided by lines of fruit trees of different kinds, intermixed with mulberry trees, poplars, and oaks; and that the benefit of these trees may not be limited to the shade they produce, they support vines. Speaking generally, farms in Piedmont are small, and are usually held on the *métayer* system, the landlord receiving half the produce, and paying the taxes and repairing the buildings.

Few countries have so large a disposable produce as Piedmont. It has an immense number of cities and towns; and yet the Riviere of Genoa, Nice, and the country as far as Toulon, are supplied with corn and cattle from its superabundant produce. The produce of maize is considerable; and it constitutes the principal support of the country population, who make use of it under a

variety of forms. The most usual course of husbandry consists of what would be called in England a four-shift, the first year being maize, the second wheat, the third clover or fallow, and the fourth wheat. It is customary to mix French beans and hemp along with the maize. Wheat is sown on narrow ridges, and is earthed over by the plough, which in Piedmont is an implement of a better kind than in most parts of Italy. Wheat harvest takes place in the beginning of July: it is thrashed by means of cylinders drawn by horses over the straw, which is turned up by forks. According to Arthur Young (ii. 209), the common produce of the wheat crops in Piedmont does not exceed six times the seed, which, considering the quality of the soil, he is justified in calling 'miserable;' but the better crops yield between ten and eleven seeds, or even more; and with a better rotation, and more care, this might be made the average produce of the plain. To the corn crops must be added those of hemp, which is sometimes considerable, and silk, for which Piedmont is famous, with wine, vegetables, and fruit; the produce of the farm-yard, and the profit of rearing and fattening stock.

The olive is the chief article of culture S. of the Apennines. The land in the Genoese territory is generally hilly and rocky, but has mostly a S. aspect, suitable for the olive and the vine. The cultivated land is supposed to comprise about one-fourth part of the surface. The land here is divided into very small farms, those near the towns comprising only about six acres, and those in the interior about twice as much. Only a small proportion of the land is cultivated by proprietors: it is usually let on leases of three, five, seven, or nine years, but never more; the rent of cultivated land near Genoa is very high. In the greater part of the Genoese territory the rent is paid in cash or in produce, as wine, oil, grain, &c., rated at a fixed price; but in the provs. of Novara and Alessandria the rent is paid, as is usual in the rest of the kingdom, on the *métayer* principle; the landlord furnishing the land and one-third the seed, and receiving two-thirds the produce. Wheat and maize are generally sown alternately on the same land; and good land is said to yield usually from four to six for one, or double that quantity when it is tilled with the spade, as is customary in some parts. Each farm of four or five acres supports a family. Labourers get from 3*l.* to 5*l.* a year, with board and lodging. Their usual diet consists of Indian corn, chestnuts, potatoes, beans, and fruit, making little or no use of butchers' meat. Women work in the fields, and tend the cows, in addition to spinning, weaving, and other domestic work, in which they are very industrious. Paupers, however, are more numerous in the towns than in the country.

The mineral riches of the country are little explored; but iron of good quality, lead, copper, sulphur, manganese, and cobalt, abound in the mountains of Piedmont. The mines of Pesey, in the Tarentaise, formerly yielded from 30,000 to 40,000 cwts. of lead, and about 4,000 marcs of silver a year. Alabaster, fine marble, serpentine, and slate, are plentiful. Salt is found both in mines and in springs. There are some forges, and other iron works; but the principal manufactures consist of silk stuffs, velvets, and stockings, mostly consumed in Italy. Coarse woollen and linen goods are made in several provs., and coarse stuffs for the rural pop. Sail-cloths, cables, house furniture, paper, white lead, glass, earthenware, optical and surgical instruments, jewellery, and works of art and *virtù*, are among the articles made at Genoa, and other principal towns, and

there are numerous brandy and liqueur distilleries and tanneries.

The great articles of export consist of raw and thrown silks, with silk stuffs and velvets, which are largely produced at Genoa; then come olive oil, woollens, paper, rice, vermicelli, and a variety of inferior articles. The leading articles of import consist of corn from the Black Sea, principally for the supply of Genoa and the surrounding district; raw cotton and cotton fabrics, sugar and coffee, indigo and other dye stuffs; hardware, cutlery and iron; salt fish and tobacco.

SAREPTA, a town of European Russia, near the frontiers of the government of Saratoff, on the Sarpa, near its confluence with the Wolga. Pop. 4,520 in 1858. The town was founded in 1765, by a colony of Harnbutters in Moravia: it is well built, neat, clean, and fortified, so as to be secure from the predatory incursions of the contiguous nomadic tribes. Its inhabs. are distinguished by their industry: they manufacture linens, silk and cotton stuffs, with stockings and caps, in great request all over the empire. They also raise and manufacture tobacco and distil spirits.

SARGUEMINES, a town of France, dép. Moselle, cap. arrond., on the Sarre, 41 m. E. by N. Metz. Pop. 6,075 in 1861. The town, under the name of Guemond, was formerly one of the strongest in Lorraine; but no portion remains of its ancient fortifications except a dismantled citadel, now appropriated to the *gendarmérie*. The sub-prefecture, hall of justice, and college, occupy the buildings of a Capuchin convent, founded in 1721. There are some spacious prisons. Sarguemines has manufactures of cotton thread, forks, spoons, and earthenware of a superior quality; and is the *entrepôt* for the *papier-mâché* snuff-boxes made in the surrounding villages, and of which it is said to export 100,000 dozens a year.

SARI, a very ancient city of Persia, prov. Mazanderan, of which it is the cap., about 18 m. from the S. shore of the Caspian, and 115 m. NE. Teheran. Previously to 1836 it is said to have had from 80,000 to 40,000 inhabs., who carried on a brisk trade with Astrakhan and the interior of Persia (Frazer's Trav. on the Caspian, p. 14); but about that time it was nearly depopulated by the plague. Sari is surrounded by a ditch and a mud wall, flanked by pentagonal brick towers. The gateways have fallen down, and roads have been broken through the wall in every direction. The appearance of the town differs essentially from that of any other in Persia S. of Elburz. The houses are built of burnt brick, and neatly tiled; some of the streets are well paved; and, although the marks of ruin are everywhere visible, Sari has something of the appearance of an English village or small market-town.

Sari is frequently mentioned by the poet Ferdousi. Its vicinity is flat, woody, and well watered.

SARK, or **SERCQ**, one of the islands belonging to Great Britain, in the English Channel, lat. 49° 28' N., long. 2° 24' W., intermediate between Guernsey and Jersey, 7 m. E. the former, and 9 m. NW. the latter; length, and greatest breadth, about 2 m. each. Pop. 583 in 1861. The island is divided into two portions, Great and Little Sark, united by a narrow neck of land. It differs little from the adjacent islands in its physical features. The soil is sandy and produces most kinds of grain and vegetables. A good many fish and sea-fowl are taken round its coasts. The inhabs. make

SARNO, a town of South Italy, prov. Salerno, cap. cant., at the head of the river Sarno (an *Sarnus*), 11½ m. NW. Salerno. Pop. 16,374 in 1862. Sarno is a well built and flourishing town, having a handsome cathedral, several convents, an old castle, belonging to the Barberini family, a seminary, hospital, some sulphurous baths, and manufactures of paper and copper wares.

Sarno is celebrated in history for the desperate battle fought in its vicinity, *anno* 553, between the troops of Justinian under Narses, and the Goths under their king Teias. The entire defeat of the latter, and the death of their monarch, terminated the Gothic kingdom and power in Italy.

SARTHE, a dép. of France, reg. NW., between lat. 47° 35' and 48° 40' N., and long. 0° 25' W. and 0° 50' E.; having N. Orne, E. Eure-et-Loire and Loire-et-Cher, S. Indre-et-Loire and Maine-et-Loire, and W. Mayenne. It is of a compact shape, 60 m. in length, N. and S., and about the same in breadth, E. and W. Area, 620,668 hectares. Pop. 466,155 in 1861. Surface generally level, except in the NW., where there are a few hills. The principal rivers are the Sarthe, with its tributaries the Vegre, Huisne, and Loir. The Sarthe rises near Mortagne, in the dép. Orne, and runs with a very tortuous course, S. and SW., to the vicinity of Angers; near which it receives the Loire, and unites with the Mayenne to form the Maine, after an entire course of nearly 160 m. In the 15th cent. it was navigable to Le Mans, but its navigation is now difficult for some distance below that city. Besides Le Mans, Alençon stands on the Sarthe. The soil of this dép. is various; in some parts there are rich lands, but poor sandy tracts predominate, especially in the SE. The arable lands are supposed to comprise 393,456 hectares, meadows 58,120 ditto, vineyards 10,081 ditto, orchards 19,479 ditto, and woods 68,319 ditto. Wheat, barley, and rye are the principal corn crops; and are sufficient, along with potatoes, for the consumption of the pop. The produce of wine is not enough for the consumption; but about 220,000 hectol. of cider and perry are annually manufactured. Live stock abundant and good. Bees are but little reared; and the wax, in which Le Mans has a considerable trade, comes mostly from the neighbouring dép. Hardware, paper, woollen fabrics, leather, wax candles, sail-cloth, glass and earthenware, soap, and other articles of necessity, rather than of luxury, are the goods principally manufactured in Sarthe. The iron forges produce annually about 1,000,000 kilogr. of good iron. The *étamines* of Maine formerly enjoyed great celebrity, but other fabrics have superseded them; so that St. Calais, and other towns where they were chiefly made, have fallen into decay. Sarthe is divided into 4 arronds.; chief towns, Le Mans, the cap., La Flèche, Mamers, and St. Calais.

SARUM (OLD), an ancient, and now totally ruined city and bor. of England, co. Wilts, on a hill, 2 m. N. Salisbury, or New Sarum. It was the *Sorbiadunum* of the Romans; and, being surrounded by walls and defended by a castle, became a place of considerable consequence under the Saxons. Under William the Conqueror, the bishop of Shireburn and Sunning removed his see thither; and such was its importance that parliaments were held in it under subsequent Norman kings. But it always laboured under various inconveniences, the principal of which was the total want of water; and in consequence of this, and of disputes

Sarum, or Salisbury; and the seat of the bishopric being translated to the latter, in the reign of Henry III., Old Sarum fell into a state of total decay, and was almost wholly deserted in the early part of the reign of Henry VII. For a lengthened period there have been hardly any vestiges of its ruins.

Old Sarum sent 2 mems. to the II. of C. in the reign of Edward III.; and, notwithstanding its total decay, the proprietor of the burgage tenures in the bor., or of the land on which it once stood, was permitted to exercise this important privilege in its name down to the passing of the Reform Act, when it was disfranchised. Not having a single house or inhab., Old Sarum afforded the most perfect example of a nomination bor. The property several times changed hands; and though the estate was of little intrinsic value, the privilege it possessed of manufacturing two law-makers for the British empire, made it sell for a very large sum. It may well excite astonishment that such an outrage on the principles of representation should have been permitted to exist for so lengthened a period.

SARUN, a district of Hindostan, presid. Bengal, prov. Bahar, and one of the richest and most prosperous in British India, between lat. $25^{\circ} 30'$ and $27^{\circ} 30'$ N., and the 84th and 86th degs. of W. long.; having W. Goruckpoor, S. Ghazepoor, Shahabad, and Patna, E. Tirhoot, and N. Nepal. Length, N. to S., about 110 m.; breadth, varying from 25 to 80 m. Area, 5,760 sq. m. Pop. estimated at 1,500,000 in 1861. It is well watered; the Ganges forms its entire S. boundary, and the Gunduck intersects it near its centre; it supplies in abundance all the principal products of the East, besides good timber for ship-building. There is little jungle or waste land; cattle, though not numerous, are of good quality. Manufactures few; the principal is that of saltpetre, a great deal of which is produced in this district. The Mohammedans form but a small portion of the entire pop. Chief towns, Chuprah, Bettiah, and Maissy.

SASSARI, a city of Italy, island of Sardinia, cap. of its N. division, in the NW. part of the island, on the *Turritano*, about 10 m. from its mouth at Porto Torres, in the gulf of Sassari, 58 m. N. by W. Oristano, and 100 m. NNW. Cagliari. Pop. 23,672 in 1862. The city is surrounded by a wall, strengthened by square towers, with five gates and a citadel, the latter being now used merely as a barrack. It has a good main street; and is surrounded by public walks, shaded by trees. Sassari has numerous churches, convents, and nunneries, a Tridentine seminary, and a public hospital. The cathedral, a massive structure, has a disproportionately large and very elaborate façade; but its interior is clean and airy, and it has several good sculptures, including a monument by Canova. The university is established in the former Jesuit's college. The palace of the governor is an extensive edifice, and the public buildings in general are well adapted for their intended purposes. It is the seat of an archbishop, of a tribunal of secondary jurisdiction, with appeal to the *Audienza Reale* of the island, and of a tribunal of commerce; and is the residence of the vice-intendant and vice-treasurer of Sardinia, and of a military governor. It has a considerable trade in tobacco, oil, and fruits.

Porto Torres (an. *Turris*), its port, 10 m. distant, can only accommodate small vessels; ships of large size being obliged to anchor in the roads nearly one mile outside, where however, the anchorage is good. Sassari rose on the decay of *Turris*, during the insecurity of the middle ages. Agriculture appears to be better conducted in its

vicinity than in any other part of the island. Immediately without its walls is the fountain of Rosello, an abundant source of water, embellished with much architectural ornament.

SASSBACH, or Saltzbach, a village of the grand duchy of Baden, bailiwick of Achern, at the foot of the mountains of the Black Forest, on an affluent of the Acher, 17 m. ENE. Strasburg. This village, which has about 1,000 inhabs., has acquired a high degree of historical interest from the famous Marshal Turenne having been killed in its vicinity, by a random shot, on the 27th of July, 1675. The circumstances attending the death of this great general have been detailed by Voltaire (*Siècle de Louis XIV.*, cap. 12) and other distinguished writers. His remains, deposited by order of Louis XIV. in the royal burying-place in the abbey of St. Denis, escaped, at the era of the Revolution, the fanatical violence that scattered the dust of so many kings. At length, after various vicissitudes, they were deposited in the church of the Invalids, by order of the still more illustrious captain now entombed within the same sacred precincts. A monument, in honour of Turenne, erected in 1781 on the place where he fell, was repaired in 1801 by Moreau, and was reconstructed of granite in 1829. The funeral orations in honour of Turenne, by Flechier and Mascaron, are held to be *chefs-d'œuvre*.

SATALIEH, or ADALIA. See ADALIA.

SATTARAH, a considerable town and fortress of Hindostan, prov. Bejapoor, about 60 m. SSE. Poonah. Lat. $17^{\circ} 42'$ N.; long. $74^{\circ} 12'$ E. The fort stands on a scarped hill; at the foot of which is the town, built partly of stone, and partly of mud or unburnt bricks, but comprising no edifice of note, except a new palace. The fort, though naturally strong, was taken by Sevajee from the Bejapoor sovereign in 1673, by Aurungzebe in 1690, and by the British in 1818. The British cantonments are about 2 m. to the E. Sattarah was, under Sevajee and his immediate successors, the cap. of the Mahratta empire.

SAUGUR, or SAUGOR, a large town of Hindostan, prov. Malwa, in the ceded districts on the *Nerbuddah*; lat. $23^{\circ} 48'$ N., and long. $78^{\circ} 47'$ E.; taken by the British in 1818. Saugor is also the name of an island of the Sunderbunds, at the mouth of the Hooghly, about 60 m. SSW. Calcutta. A railway to connect it with that city was projected a few years ago, and is now probably completed.

SAUMUR, a town of France, dép. Maine-et-Loire, cap. arrond., on the Loire, 28 m. SE. Angers, on the railway from Angers to Tours. Pop. 14,079 in 1861. The Loire here forms several islands, and is crossed by five or six bridges, one of which, a stone bridge of 12 arches, 284 yds. in length, long considered as one of the finest in France, connects the town with its suburb of La Croix Verte. Saumur is built partly at the foot, and partly on the declivity, of a hill crowned by a citadel. Its lower portion is tolerably well laid out, and has a handsome quay and terrace facing the river; but the upper town is irregular, and the streets inconveniently steep. The castle, which appears to have been constructed at different periods between the 11th and 13th centuries, was the occasional residence of the kings of Sicily and the dukes of the house of Valois: for some time previously to the Revolution it was a state prison; it now serves as an arsenal. There are several churches worth notice; one of which, curious from its antiquity, is supposed to have been constructed in the 5th or 6th century; and another, *Notre Dame des Ardilliers*, is remarkable for its beauty, having a fine

supported on Corinthian columns, and an altar-piece by Philip de Champagne. The barracks are among the best of that description of edifices in France; they are four stories in height, and can accommodate 1,200 men. The town-hall, public library, public baths, and theatre, are the other principal buildings. Not far from the town is a famous riding-school. It has manufactures of linen cloths, handkerchiefs, necklaces, copper and iron wares, leather and saltpetre; with a brisk trade in provisions, and 4 large annual fairs.

Saumur was taken in 1026 by Fulk of Anjou, and, after many vicissitudes, was annexed to the French crown in 1570. A Protestant academy, founded here by the famous Duplessis Mornay, the friend of Henry IV., governor of the town for a lengthened period, was dissolved by Louis XIV. in 1684.

SAVANNAH, a city and port of entry of the U. States, state Georgia, on the river of its own name, about 12 m. from its mouth, and 80 m. SW. Charlestown. Pop. 31,109 in 1860. Savannah stands on a bluff sandy point, rising about 40 ft. above the river, from which it has an imposing appearance; its spacious and regular streets, and handsome public buildings, being interspersed with many trees. Previously to 1820, when it suffered from a terrible fire, it was mostly built of wood, and it was formerly also insalubrious from the contiguity of rice swamps. This evil has, however, been effectually obviated; and being now principally of neat stone houses, it is one of the handsomest towns in the S. States. It has numerous churches, an exchange, and many academies. Previous to the breaking out of the great civil war, it was one of the principal ports in the U. States for the export of cotton. It also exports considerable quantities of rice.

SAVE (Germ. *Sau*, an. *Sarus*), a river of the Austrian empire, and one of the principal tributaries of the Danube. It rises towards the N. extremity of Carniola, in about lat. $46^{\circ} 30'$ N., long. 14° E., and runs at first SE. through the government of Laybach and Croatia, to about lat. $45^{\circ} 15'$, long. 17° . It thence has more of an E. direction, forming the boundary line between the Austrian prov. of Slavonia on the N., and Turkish Croatia, Bosnia, and Servia on the S., till it enters the Danube at Belgrade, after a course of about 590 m. Its chief affluents are the Kulpa, Unna, Verbas, Bosna, and Drina. Though not very rapid, its inundations are often very destructive. Being navigable as far as the mouth of the Kulpa, for vessels of from 150 to 200 tons, it is a good deal used for commercial purposes. Few towns of any consequence are, however, situated on its banks, the principal being Brod and Krainburg; Laybach, Agram, Petrinia, and Posega are, however, at no great distance, and some of them are seated on its tributaries.

SAVERNE (an. *Tabernæ*), a town of France, dép. Bas-Rhin, cap. arrond., on the Zorn, a tributary of the Rhine, 19 m. NW. Strasburg. Pop. 5,295 in 1861. Though finely situated, it is but indifferently built, and has no remarkable edifice, except an old palace, formerly belonging to the bishops of Strasbourg, but now used for the police barracks and prison. The town has manufactures of woollen cloths, hosiery, and hardware, with some trade in timber floated down from the Vosges by the Zorn.

SAVONA, a town and sea-port of N. Italy, prov. Genoa, cap. dist. on the Mediterranean, 20 m. SW. Genoa. Pop. 18,959 in 1862. The town has ramparts, which, however, are of no great

badly paved. It had formerly two harbours, the best of which was filled by the Genoese in 1525, from jealousy: the other, formed by a mole projecting E. into the sea, is small, and is rather difficult of approach, from the accumulation of sand and mud near its mouth. Savona is a bishop's see, and the seat of judicial and commercial tribunals: it has manufactures of silk goods, iron, and earthenware, and exports oranges and lemons, grown in its vicinity.

Savona was the birthplace of Popes Sixtus IV. and Julius II., and is said to have been for some time the residence of Columbus. Pope Pius VII. was also detained in it in 1810-11, by order of Napoleon.

SAXONY (KINGDOM OF), a secondary state of Central Europe and of Eastern Germany, principally between lat. $50^{\circ} 10'$ and $51^{\circ} 30'$ N., and the 12th and 15th degs. of E. long.; having W. the indep. Saxon principalities; N. Prussian Saxony and Brandenburg, and S. Bohemia. It is of a triangular shape. Length, E. to W., about 140 m.; greatest breadth nearly 90 m. The kingdom is divided into four kreise, or circles, of the following area and population, according to the census of 1852, and of December 1861.

| Circles | Area in Sq. Miles | Population | |
|-------------|-------------------|------------|-----------|
| | | 1852 | 1861 |
| Dresden . . | 1,674 | 507,705 | 583,213 |
| Leipzig . . | 1,842 | 446,826 | 506,294 |
| Zwickau . . | 1,790 | 735,557 | 827,245 |
| Bautzen . . | 971 | 297,744 | 308,488 |
| Total . . | 6,777 | 1,987,832 | 2,225,240 |

The increase of population—287,408 in nine years, or 26,378 per annum—is inferior to that of most other European states.

The Erzgebirge (ore mountains) and the Riesengebirge (giant mountains) extend along almost the whole of the S. and SE. frontier, but they nowhere rise to 4,000 ft. of elevation. Their declivity is more gradual and undulating on the Saxon than on the Bohemian side; so that they cover the greater part of the country with their ramifications, rendering it either mountainous or hilly. There is, however, a very considerable extent of level ground, extending from the foot of the hilly tract, or from Coditz, Meissen, and Bautzen, northwards, all along the frontier of Prussian Saxony. The country to the SE. of Dresden, where the Elbe forces its way through the mountain chain, has been called the 'Saxon Switzerland.' It is about 30 m. in length by 24 in breadth, diversified, and highly picturesque; but its name is likely to convey a wrong impression of its scenery, its highest summit, the Schneeberg, being only 2,150 ft. in height. The spurs given off by the Erzgebirge to the N. enclose the valleys of the Elbe, the two Muldas, the Zochoppau, Elster, and Pleisse, all of which flow to NW., and, except the first, which is navigable throughout the whole extent of the kingdom, rise in Saxony.

Saxony has a milder climate than most parts of continental Europe in the same lat.; the mean temp. of the year is about 47° Fah.; that of the winter quarter being 35° , and of the summer 59° , at an average of the entire country, which has a mean elevation of about 1,100 ft. above the sea. Landed properties are rather of limited size; but in all the rural districts the people appear to be contented, and, on the whole, comfortable: pau-

Saxony. Every spot of earth which seems capable of giving a return is cultivated; and the meadows are mowed twice or thrice in the course of each summer. There is no such a thing as a common or waste, while the forests are all guarded with a strictness proportionate to their value. The fields are always well cleared of weeds. Rye, wheat, and barley are scarcely grown, except in the low country; in the mountain region they are met with only in the valleys, oats and potatoes being there the chief crops. Pease, vetches, millet, teasel, flax, oil seeds, tobacco, and garden vegetables, are generally cultivated; and artificial grasses are nearly universal. But, notwithstanding the improvement of agriculture, and the industry of the people, considerable quantities of corn have to be imported. A great deal of fruit is grown; and between 7,000 and 8,000 morgen of land is occupied with vineyards. The forests, which occupy about one-fourth part of the entire surface, consist of fir, pine, beech, oak, elm, maple, and larch. Upwards of one-third part of the woods belongs to the crown, yielding an annual revenue of 2,000,000 thalers; and nearly 10,000 individuals are engaged in wood-cutting.

Saxony is celebrated for her breeds of sheep, which are among the finest in Europe. A late elector of Saxony introduced the breed of Merino sheep into his dom., and exerted himself to promote the growth of this valuable race of animals with such success, that they are now found to succeed better in Central Europe than in Spain; and, notwithstanding the rapidly increasing importations from Australia, a large portion of the immense quantity of wool imported into Great Britain continues to be brought from Saxony and other German states. The best wool is produced on the sheep-walks of the Saxon Switzerland. The cattle of Saxony, the number of which exceeds 550,000, are also of a superior description; but the butter is usually indifferent, while, to increase its weight, it is frequently overloaded with salt. But, such as it is, the demand for it is universal. 'Never,' says an English traveller, Mr. Strang, 'did I witness so much butter daily consumed, as I have seen since I entered this kingdom. Here, in short, bread and butter is the order of the day at all hours. It is the perpetual family staple, and essential as a make-weight at every meal. You find it with equal propriety at breakfast, at lunch, at dinner, and at supper. A larder in Saxony may well be called the *buttery*.' Horses are not so extensively reared as other live stock, and hogs are not numerous. The game laws are very rigidly enforced, all sorts of birds being included in their enactments; and rights of fishing appear to be preserved with the most scrupulous tenacity.

Mining is one of the principal occupations of the inhabs. Few parts of Europe equal the Erzgebirge in the variety and extent of their mineral riches. The basis of these mountains is granite, covered by gneiss, mica, and clay slate in succession, between which are other strata containing metallic ores. Upwards of 500 mines are wrought, which are said to employ about 11,000 workmen; and between 50,000 and 60,000 persons derive their subsistence from mining industry and the manufacture of metallic products. The total annual value of the metals obtained is estimated at 1,760,000 thalers; the silver producing nearly 930,000, and the iron and iron-wares 400,000. Lead, bismuth, arsenic, antimony, cobalt, and manganese are the other principal metals. Freiberg is the centre of the silver mining district. The neighbourhood of Meissen yields the fine por-

About 1½ million *scheffel* of coal are annually produced. Salt is scarce since the salt mines, formerly included in the Saxon dom., were separated from them in 1815, and this important necessary is mostly imported from Prussia. Serpentine marble and fine building stone, are abundant; as are various gems, including the topaz, jasper, and agate.

The most important branch of manufacturing industry in Saxony is that of cotton. Its extension has been attributed to the nearly contemporaneous introduction of the potato, called by the German writers the 'manna of the mountains,' and which has enabled the Saxon weavers to obtain a sufficiency of food at exceedingly low wages. Most descriptions of cotton fabrics are now produced, and many new factories have been established in Chemnitz, Zwickau, Auderan, Freiburg, and other towns. Great efforts are making to improve the construction of machinery; and joint-stock companies for the purpose have been established near Chemnitz and Dresden. Coal has been found in the neighbourhood of Dresden. Cotton-printing works are on the increase, and have been much improved within the last few years. Although the Saxon prints, in general, are not equal to the best English in beauty of pattern, or brightness and fastness of colouring, they make up for these deficiencies by the cheaper rates at which they can be produced. The only article, however, in which the Saxons come into competition with British goods in the American and other foreign markets is cotton hosiery, particularly the inferior descriptions. There is no branch of industry which seems more appropriate to Saxony than this. It requires only a small outlay of capital for the stocking-maker; his wooden frame is not expensive; the cost of his stock of cotton twist is small; and by associating agricultural with manufacturing industry, he supplies himself from his own little farm with the principal necessities. Most of the stocking-weavers of Saxony are independent labourers, buying for themselves the raw material and selling their manufactured stockings to a number of small collectors, who furnish the Chemnitz or the Leipsic markets. The manufacture of linen in Saxony is also of considerable importance. The spinning of flax employs numerous hands; but, notwithstanding, about 10,000 cwt. of yarn is annually imported from Silesia and Bohemia, and latterly there have been considerable importations from England. Much attention has been paid of late to the manufacture of machinery, though it is still behind what is met with in the manufacturing districts of Great Britain. The Jacquard loom is gradually being introduced, and there are schools of manufactures at Dresden, Chemnitz, and Plauen. Plain and figured silks, of very fair quality, are made at Annaberg, Penig, and Frankenberg. The government is very desirous of promoting the culture of silk, and some establishments for the propagation of the worms exist at Dresden and Leipsic; but in such a climate they can hardly be expected to have much success. Wooden wares are made in the country, and Saxony supplies furniture of every description, musical instruments, &c., to a great part of Germany. Porcelain and *modern antiques* are articles made in large quantities, particularly at Meissen. The china produced here formerly enjoyed a very high reputation throughout Europe, but, owing to the extraordinary improvements made in the manufacture in Great Britain and other countries, Meissen china has declined considerably from its ancient celebrity. Almost every article of use or

in paper, of which the Saxon manufactures do not produce nearly enough for the immense consumption of the presses of Leipsic and Dresden.

The extension of the cotton and woollen manufactures of Saxony, since 1833, is wholly, or almost wholly, ascribable to the circumstance of her having then joined the Zollverein, or German Commercial League. This opened a widely extended market for her products among the German states, from the greater number of which they had previously been either wholly excluded, or admitted only clandestinely, and under great difficulties. Saxony, in fact, has derived the greatest advantage from the league, much more, in proportion to her extent and population, than Prussia. Little or no cloth of Saxon manufacture has hitherto found its way to the United States.

The extensive commercial relations of Saxony owe their origin to the enlightened policy of Frederick Augustus, the elector, afterwards king of Saxony, who, at a time when protecting and prohibitory tariffs surrounded his states, adopted a liberal commercial system, and converted Saxony, and especially Leipsic, into one of the most important marts, not merely for the supply of central and northern Europe, but part even of Asia, with all sorts of manufactured produce. The fairs at Leipsic were for a lengthened period the great sources whence Russia, as far as the borders of China, Poland, the provinces on the Danube, and many parts of the Turkish and Persian dominions, were supplied with manufactures; and though they have latterly declined, they still continue to be resorted to. Leipsic has been for a lengthened period the centre of the book trade of Germany, being, London and Paris only excepted, the greatest literary emporium in the world.

Government. — The present constitution of Saxony dates from September 4, 1831; but has undergone alterations and modifications by the laws of March 31, 1849; May 5, 1851; November 27, 1860; and October 19, 1861. According to the terms of the Constitution the crown is hereditary in the male line; but, at the extinction of the latter, also in the female line. The sovereign comes of age at the completed eighteenth year, and, during his minority, the nearest heir to the throne takes the regency. In the hands of the king is the sole executive power, which he exercises through responsible ministers. The legislature is jointly in the king and parliament, the latter consisting of two chambers. The upper chamber comprises the princes of the blood royal; the proprietors of eight baronial domains; twelve deputies elected by the owners of other nobiliar estates; ten noble proprietors nominated by the king for life; the burgomasters of eight towns; and the superintendents and deputies of five collegiate institutions, of the university of Leipzig, and of the Roman Catholic chapter of St. Peter at Bautzen. The lower chamber is made up of twenty deputies of landed proprietors; twenty-five of towns and city corporations; twenty-five of peasants and communes; and five representatives of commerce and manufacturing industry. The qualification for a seat in the upper house, as well as the right of election to the same, is the possession of a landed estate, worth at least 1,000 thalers a year; which qualification, however, is not required by the *ex officio* deputies of chapters and universities. To be a member of the lower house no fixed income is required; and electors are all men above twenty-five years of age who pay taxes, or contribute in any way to the public burdens. A salary is attached to the performance of the legislative functions: the members of the

upper house being allowed seven thalers, or about a guinea a day, during the sittings of parliament, and the deputies to the second chamber three thalers, or 9s. Both houses have the right to make propositions for new laws, the bills for which, however, must come from the ministry. No taxes can be made, levied, or altered without the sanction of both chambers.

All towns elect their own municipalities, and are governed by laws of their own; while the rural districts are divided into departments, each of which has its own magistrates, whom the people not only choose, but may also, in case of malversation, degrade from office. The municipal officers, also, though elected by the citizens for life, are liable, on conviction of incapacity or unfair dealing, to be degraded. Their powers are very considerable in reference both to person and property, for they regulate the police, hear and determine civil causes, and both fix the amount of local rates to be levied on the citizens, and determine how the produce shall be expended. In the election of the magistrates, every ratepayer has a vote. They are all salaried officers.

There are civil and criminal courts in the cap. of each circle, and a high court of appeal in Dresden, in which latter all capital cases are tried. There are special military tribunals, a superior fiscal court, university court at Leipsic, mining tribunal at Freiburg, and patrimonial tribunals. The reigning family is Rom. Catholic, but there are not more than 20,000 Rom. Catholics in the kingdom, the great bulk of the pop. being Lutherans. Literature and the fine arts have flourished more in Saxony than in any other part of Germany; and there is scarcely any country in Europe where primary instruction is so widely diffused, the number of the individuals attending schools and other seminaries is said to be as high as one in six of the population. The university at Leipsic is the principal seminary.

Every male inhab. 20 years of age is, with certain exceptions, obliged to serve in the army for six years in time of peace, and for three years subsequently in the reserve corps. The armed force is extensive; it consists of 25,400 men, of whom 10,000 are privates under arms, besides the reserve corps of 3,000 more. This kingdom holds the 4th rank among the German states, having four votes in the full diet and one in committee, and furnishes a contingent of 20,000 men to the army of the Confed. Its public revenue amounted to 1,853,452*l.* in 1863, and the expenditure to the same sum.

The greater part of the railways of Saxony are state property, and a very considerable revenue, varying from 1,500,000 to 1,800,000 thalers, is derived from this source. The length of state railways, at the beginning of 1862, was 252 m., built at an expense of 42,657,000 thalers, or 6,398,550*l.* The value of the public domains, chiefly forests, was estimated, at the same date, at 25,241,393 thalers, or 3,786,210*l.*

The public debt amounted, in 1861, to 61,725,499 thalers, or 9,258,825*l.* The greater part of it is of ancient date, created by the connection of the electors of Saxony with the throne of Poland. The debt amounted, in 1764, to 29,028,425 thalers; it had fallen, in 1806, to 14,932,885 thalers, but risen again, at the end of the Napoleonic wars, in 1815, to 22,857,626 thalers. It was settled at the congress of Vienna, when about one-half of the territory of Saxony was made over to Prussia, that the latter should also take a portion of the public debt. The amount left to Saxony was 16,660,771 thalers. This debt had increased, in 1830, to 19,763,250*l.*

mented in still larger proportions, owing mainly to the establishment of a network of state railways, built at a cost of 42,657,000 thalers.

The Saxons are among the best specimens of the old Teutonic race. In person they bear a striking resemblance to the English agricultural pop. The Saxon royal family is said to be descended from Witichind, sovereign of this territory in the time of Charlemagne.

Saxony was created an electorate in 1422, which title it retained till 1806, when Napoleon erected it into a kingdom. During the war the king of Saxony was, from the battle of Jena downwards, a firm ally of Napoleon, who made extensive additions to his dominions; and he did not abandon the fortunes of his benefactor till after the battle of Leipsic had compelled the French to evacuate Germany. This conduct led to the dismemberment of the kingdom by the treaty of Vienna in 1815; some of its most valuable provinces were then assigned to Prussia, and, but for the opposition of Austria, it is probable that Saxony would then have ceased to exist as a separate state.

SAXONY, a prov. of the Prussian states, consisting of the territories dismembered from the kingdom of Saxony in 1815, with the Saxon states formerly belonging to Prussia, has on the N.E. and E. Brandenburg, S. the kingdom of Saxony and the Thuringian states, and on the W. Hesse, Brunswick, and Hanover. It is of a very irregular outline, has several *enclaves*, and includes within its frontiers the independent principalities of Anhalt, Sondershausen, &c. Area. 9,765 sq. m. Pop. 1,975,932 in 1861. The prov. is divided into three regencies, and these again into 41 circles. Principal towns, Magdeburg, Halle, Erfurth, Merseburg, Naumburg, and Burg. The Hartz mountains lie on the W. frontier of the prov.; but, with this exception, there are no hills of any considerable magnitude. Principal rivers, the Elbe and its affluent, the Saale, Mulda, Unstrut. Soil in parts sandy and unproductive, but in general loamy and fertile. The plain of Magdeburg is reckoned the best land in Prussia, and is very well cultivated. Principal products, wheat and other sorts of corn, flax and hemp, excellent wool, and tobacco. The vine is cultivated in the neighbourhood of Merseburg and some other places. Productive mines of coal, iron, and rock-salt are wrought in different parts of the province. The stock of sheep exceeds 2,000,000 head, and wool, which has been vastly improved by crossing with Merinos and other fine-woolled breeds, has become a staple product. Manufactures important and valuable, consisting of fine woollens, linens, earthenware and porcelain, and hardware.

SCARBOROUGH, a sea-port, parl. and mun. bor., market town, and par. of England, N. riding, co. York, and E. div. of the wap. of Pickering Lythe, on a rocky slope, rising from an extensive bay, 35 m. N.E. York, and 227 m. N. London by Great Northern railway. Pop. of bor., 18,377 in 1861. Area of parl. bor. (which includes, with the old bor. and par., the extra-parochial distr. of the castle), 2,160 acres. Scarborough has a very striking appearance from the sea, from which it rises amphitheatrewise to a considerable height. It is well built; the streets in the upper part of the town are spacious and well paved, and the houses generally have a handsome appearance. It is also extending SW. towards Falsgrave, and southward along the shore. The principal public buildings are the town-hall, trinity-house, news-room, assembly-rooms, a neat and well-conducted theatre, a sea-bathing infirmary, many bathing establishments, and two public libraries. But the

handsomest and most classical building belonging to the town is the museum, a rotunda 37½ ft. in diameter, by 50 ft. in height, in the Roman Doric style. It is constructed of the Kelloway limestone, and, though of recent erection, has a valuable collection of specimens illustrative of the geology and natural history of the N. riding. A fine iron bridge of four arches, supported on massive stone piers, 70 ft. in height, has been thrown across a ravine to connect the higher town with the spa, ½ m. to the S. This handsome structure, which cost 9,000*l.*, raised by subscription, was completed in 1828. The par. church, which was given by Richard I. to the abbey of Cîteaux, in Burgundy, stands on an eminence not far from the ruins of the castle: it was formerly much larger than at present; but the part now used is commodiously fitted up for divine worship. Christchurch, built in 1828, in the early English style, has accommodation for 1,300 persons. There are three other churches, and places of worship for Rom. Catholics, Wesleyan, Primitive and Association Methodists, Independents, Baptists, and the Society of Friends, to most of which, as well as to all the churches, are attached well-attended Sunday schools. A grammar school, founded in the 9th century, is but slenderly endowed; but there are several good subscription schools, including two of the National and one on the Lancastrian plan. The Amicable Society also clothes and educates between 70 and 80 boys and girls. A seaman's hospital is under the government of the Trinity House, and there are almshouses, and several other benevolent, as well as religious institutions.

The harbour, which is easy of access, is protected by two handsome piers, of modern erection; but it labours under a deficiency of water, having only from 4 ft. to 5 ft. at low ebb springs, and from 8 ft. to 9 ft. at low ebb neaps; but from first quarter flood to last quarter ebb vessels drawing 8 ft. water may enter the harbour with safety. A small foreign and pretty considerable coasting trade is carried on. On the 1st of January, 1864, there belonged to the port 109 sailing vessels under 50, and 117 above 50 tons, besides one steamer of 44 tons. The gross amount of customs' duties was 3,433*l.* in 1863. A great deal of fish is brought in here, and the fishery has greatly increased since the railway has afforded a ready access to the populous districts and great manufacturing towns in the W. Riding. Of late years several persons have embarked in the herring fishery, which is becoming an important and profitable source of employment to the fishermen. From 40 to 50 yawls belong at present to Scarborough and Filey, in addition to the numerous small boats used for fishing in-shore; and it is not unusual for 150 or 200 boats to enter the harbour during the season, at the same tide, with herrings. As an encouragement to the fisheries, the corporation remit the tithe of fish to which they are entitled; and a society has been formed to raise an honorary fund, to meet the casual losses of nets, lines, and tackle of such provident fishermen as become subscribing members; and thus insuring to them, at a slight charge, an advantageous protection.

Scarborough, in recent years, has gained for itself the name of the 'Brighton of Yorkshire.' There is annually a great concourse of visitors for the purposes of sea-bathing and amusement: they are principally of the middle classes, and from the manufacturing districts of Lancashire, Durham, and the W. riding of Yorkshire. Scarborough is, however, frequented not only for sea-bathing, but on account of its two mineral springs. Subjoined

is the result of the analysis of a gallon of water from each spring.

| | North Spring | South Spring |
|---|--------------|--------------|
| | Cubic Inches | Cubic Inches |
| Azotic Gas | 6.3 | 7.5 |
| | Grains | Grains |
| Chloride of Sodium (common salt) | 26.64 | 29.63 |
| Crystallized Sulphate of Magnesia | 142.68 | 225.33 |
| Crystallized Sulphate of Lime | 104.00 | 110.78 |
| Bicarbonate of Lime | 48.26 | 47.80 |
| Bicarbonate of Protoxide of Iron | 1.84 | 1.81 |
| Total contents | 323.42 | 415.35 |
| Specific Gravity of the Water | 1.0035 | 1.0045 |
| Temperature 49° with very little variation. | | |

It is probable that the spas may, from the growing reputation of the town, and their being so conveniently connected with it by the bridge above alluded to, again acquire some portion of that celebrity which they formerly enjoyed. The erection of a commodious saloon, in the castellated style, with embattled towers, the architectural beauty of the wells, the massive sea-wall, forming at once a secure protection to the spas and a delightful promenade, especially at high water, combined with the newly laid out ornamental walks and grounds, have materially increased the natural attractions of Scarborough as a watering-place.

Scarborough, which received its first charter from Henry II. in 1252, is divided, under the Municipal Reform Act, into two wards, the government being vested in a mayor, five aldermen, and eighteen councillors. Corp. revenue, 3,674*l.* in 1862. Quarter sessions are held under a recorder, and petty sessions are held weekly both for the bor. and North Riding. The bor. has sent two mems. to the H. of C. since 23 Edward I., the right of election down to the Reform Act being in the common council of the bor., a body comprising forty-four individuals. The Boundary Act included with the old bor. the extra-parochial precinct of the castle. Registered electors, 1,317 in 1865. It is one of the polling-places at elections for the N. riding, and the chief town of a poor-law union comprising thirty-three pars. Markets on Thursday and Saturday: cattle fairs, Holy Thursday and Nov. 23.

N. of Scarborough, on a bold, craggy eminence, commanding a very extensive sea-view, stand the ruins of a castle built in the reign of Stephen, to which Piers de Gaveston, the minion of Edward II., fled for refuge from the vengeance of the exasperated barons. The castle, after sustaining two sieges from the parliamentary troops, was dismantled at the close of the civil wars; and though a portion of it was repaired in 1745, and barracks have been subsequently built in its immediate vicinity, it is principally in ruins. The remains of the keep consist of a square tower nearly 100 ft. in height: the entire surface included within the outer walls comprises nearly 19 acres. A strong gateway still remains, with portions of the circular towers occurring at intervals in the line of the fortifications. It was, previously to the invention of artillery, one of the principal strongholds in the kingdom.

SCHAFFHAUSEN, the most N. canton of Switzerland; and, after Zug and Geneva, the smallest in the Confederation. It is between lat. 47° 40' and 47° 50' N., and long. 8° 25' and 8° 55'

E., being separated by the Rhine from the cantons of Zurich and Thurgau, while, on all other sides, it is surrounded by the territory of the Grand Duchy of Baden. Area, 116 sq. m. Pop. 35,646 in 1860. Surface undulating, its loftiest hill, the Raadenberg, in the N., rising only to about 1,200 ft. above the Rhine. The soil is generally calcareous, but fertile; and the climate is among the mildest in Switzerland. It is an agricultural rather than a manufacturing canton; and its agriculture has greatly improved within the last half century. Formerly the supply of corn was quite insufficient for home consumption; whereas, in good seasons, considerable quantities are now exported. Artificial pastures have also materially increased, as well as the number of cattle. Fruits are abundant, particularly cherries, from which a good deal of *Kirschwasser* is made; and the produce of timber is amply sufficient for the wants of the inhabs. There are nearly 5,000 arpents of vineyards, which furnish the principal article of export, wine being sent to St. Gall and Appenzell, the Black Forest, and other neighbouring districts; but of late years the competition of the wines of Baden, and the duties imposed on the Schaffhausen wines in Germany, have crippled the trade.

One of the principal branches of industry in Schaffhausen is the conveyance of goods through the canton, which is greatly facilitated by the navigation of the Rhine. Salt from Wurtemberg, timber, and other goods are conveyed through Schaffhausen to Switzerland. The manufacturing establishments comprise a few cotton and hardware factories. Accounts are kept in florins, of 60 *kreutzers*, = 20*d.* Eng. The foot is the same as that in Zurich; the lb. a little larger.

The canton is divided into twenty-four districts. The male inhabitants, of full age, and not bankrupts, paupers, or suffering a penal sentence, choose the legislative body. The latter, or grand council, consists of seventy-four members, twenty-four of whom form also the petty council, which is intrusted with most part of the executive power. The grand council meets in June every year, and is presided over by a burgomaster, who is changed annually. The pop. is wholly Protestant. Education is well attended to.

Schaffhausen was not included in ancient Helvetia, and its inhabitants resemble their Swabian neighbours rather than the Swiss. It was admitted into the Confederation in 1501.

SCHAFFHAUSEN (originally *Schiffhausen*, or *Ship-houses*), a town of Switzerland, and the cap. of the above canton, on the Rhine, 25 m. W. by N. Constance, and 49 m. ENE. Basle, on the railway from Basle to Constance. Pop. 8,717 in 1860. The town is walled, and defended by the *Munoth*, an old citadel supposed to be of Roman origin, but which is now furnished with extensive bomb-proof casemates. Streets ill paved, and the buildings are remarkable for their quaint and antique architecture; many are ornamented in front with stucco, carved, and fresco work. The *minster*, founded in 1052, is a massive edifice in the round arched style, with numerous monuments in its cloisters. An ordinary bridge across the Rhine replaces that unique specimen of art consisting of one arch 364 ft. in length, destroyed by the French under Marshal Oudinot in 1709. Schaffhausen has a gymnasium, a college with nine professors, a high female school, and an excellent library. The latter comprises the books that belonged to the celebrated historian Müller, by far the most illustrious of the natives of Schaffhausen, where he first saw the light on the 3rd of January, 1752. The town is a very ancient one, and was first mentioned in 1052.

sing between Switzerland and Germany, and Basle and Zurich, consisting of silk, cotton, and woollen goods, raw cotton, colonial produce, Nuremberg manufactures, and Swiss cheeses.

Schaffhausen is supposed to have originated about the eighth or ninth century: it was subjected by Austria in 1330, but has been independent since 1415.

The celebrated falls of Schaffhausen are situated about a league SSW. from the town, where the Rhine breaks through a ramification of the Black Forest mountains. The height of these falls, which, in some respects, are the grandest in Europe, varies, according to the season, from 50 to 75 ft., being greatest in June and July, when the river is swollen by the melting of the snow on the mountains. The stream, which, immediately above the fall, is about 300 ft. in width, precipitates itself over a ledge of limestone, four rocks projecting from which divide it in its descent into five portions. The greatest body of water falls between the first of these rocks and the castle of Laufen, on the SE. bank of the river; from which the best view of the falls is obtained. 'It is not,' says Mr. Spencer (Germany and the Germans, ii. 61), 'the height of the fall, but the immense body of water broken into spray in the most picturesque manner over the rocks, that constitutes the great beauty of the cataract. In other respects it cannot bear the slightest comparison with either those of Terni or the Staubbach.'

In 1790, Lord Montagu, a young British nobleman of great promise, was drowned in a rash attempt to descend these falls; and, by a curious coincidence, his death occurred nearly at the same time that his noble seat, Cowdrey House, near Midhurst, was burnt down.

SCHAUMBURG-LIPPE (PRINCIPALITY OF), one of the minor states of NW. Germany, principally between lat. $52^{\circ} 10'$ and $52^{\circ} 30' N.$, and about long. $9^{\circ} E.$, surrounded by the territories of Hesse-Schaumburg, Hanover, and Prussian Westphalia, exclusive of some detached lordships enclosed in the territory of Lippe-Detmold. Area, 212 sq. m. Pop. 30,774 in 1861, mostly Lutherans. It is hilly towards its S. extremity, but flat in the N., where the lake called the Steinhuder Meer occupies about 11,000 morgen. The productive portion of the surface comprises about 74,000 morgen, besides nearly 34,000 morgen of forest land, chiefly in the W. The soil is in general superior to that of Lippe-Detmold, and agriculture and cattle-breeding are more advanced. The inhabs. of both principalities employ their intervals from rural labour in spinning flax and weaving lincens. Coal is raised in the S. to the value of about 30,000 dollars a year; and forms, with corn, wool, timber, and linen goods, a principal article of export. The constitution, which dates from 1816, is a limited monarchy, the powers of the prince being similar to those of the sovereign of Great Britain; the *landstände*, or parliament, consisting of all the noble landed proprietors, with four deputies for towns, and six representatives of the peasantry. Appeal lies from the decisions of the courts of this principality to the superior court of Wolfenbittel. Public instruction, as in Lippe-Detmold, is well attended to. Public revenue, 34,050*L.* in 1863. Schaumburg-Lippe has one vote in the full diet of the Germ. Confed., and, with Lippe-Detmold, Hohenzollern, Reuss, Waldeck, and Liechtenstein, the sixteenth place, with one vote in the committee. Its contingent to the army of the Confed. amounts to 350 men.

SCHELD'T (Fr. *Escaut*), a river of France and Belgium, which rises in the dépt. Aisne, near St.

through the dépt. du Nord, and the provs. of Hainault and E. Flanders, to Antwerp, after which it turns NNW., and, dividing into the E. and W. Scheldt, which enclose the islands of Beveland and Walcheren, enters the North Sea in about the same lat. as the Thames. Its entire length is estimated at about 200 m., its breadth at Dendermond is about 650 ft., at Antwerp, 1,700 ft.; and the width of its mouth varies from $2\frac{1}{2}$ to $3\frac{1}{2}$ leagues. It is navigable from Valenciennes. Its principal tributaries are the Scarpe, Lys, and Durme, on its W., and the Dender and Rupel on its E. side. St. Quentin, Cambray, Valenciennes, Tournay, Ouderarde, Ghent, and Antwerp are on its banks. Its current is slow, and in the lower part of its course, where it runs through a completely flat country, its banks are fenced by dykes to prevent inundation. It is connected by the canal of St. Quentin and other canals with the Somme, Seine, and Loire, and with the principal rivers and cities of Belgium, in its neighbourhood. During the commercial ascendancy of Antwerp the Scheldt enjoyed a larger share of traffic than any other European river; but its importance in this respect, though still considerable, has since greatly declined. 'There was nothing,' says Barrow, (Tour in Holland) 'on this noble river, in our progress upwards, that conveyed any impression of an active or extensive commerce. In sailing up or down the Thames, or on approaching London within 4 or 5 m., the multitude of shipping affords indications not to be mistaken of the commercial wealth and prosperity of London. But the Scheldt, when we ascended it, was a vacant river; we neither met nor overtook a single sail; and, with the exception of 2 or 3 American ships, and some 10 or 12 small vessels, mostly brigs, there was little appearance of trade along the common quay of Antwerp.' This, however, was before the revolution of 1830 had made Antwerp once more the commercial emporium of Belgium; and in the interval the Scheldt has regained some portion of its former consideration.

SCHLESTADT, a fortified town of France, dépt. Bas-Rhin, cap. arrond., on the Ill, a tributary of the Rhine, 26 m. SSW. Strasburg, on the railway from Strasburg to Basle. Pop. 9,414 in 1861. The town was fortified by Vauban, and is naturally strong from its being in a great measure surrounded by marshes. It has a hospital, prison, communal college, theatre, manufactures of cotton and linen fabrics, iron wire, soap, and earthenware, for which last it was famous as long ago as the 13th century, with breweries and distilleries. It is supposed to have been the ancient *Elsebus*, destroyed by Attila, where Charlemagne and his successors had afterwards a palace. The Swedes took it in 1632, but restored it to the French two years afterwards.

SCHEMNITZ (Hung. *Selmecz-Banya*), a famous mining town of Hungary, co. Honth, in a mountainous distr. on the Schemnitz, a tributary of the Gran, 46 m. N. by E. Gran. Pop. 13,720 in 1857. The town is entered by an old and strong gateway, which conducts to a long, narrow, steep street, wretchedly paved, and so hemmed in by sloping hills that there is scarcely room for a row of houses on either side. At the end of this street is a mountain amphitheatre, the *proscenium* of which is occupied by the churches and other large buildings, while the hill sides are covered with the white cottages of the miners embosomed among trees. The town has many good-looking houses, with shops and inns; but its fine old ruined castle is the only edifice of much interest.

The mines of Schemnitz, which extend under

turies, furnish considerable quantities of silver, whence gold is again extracted. The ores vary greatly in productiveness; but, speaking generally, the mines have not been very profitable. There are 6 principal veins or courses, each from 10 to 20 fathoms in thickness, running nearly E. and W. almost parallel to, and at the distance of from 60 to 300 or 400 fathoms from each other, and connected by various small branches. In these extensive courses there are 12 royal mines, besides a number belonging to private individuals, who are obliged to dispose of all the ore they obtain to the royal smelting works at a fixed rate. The whole of these mines communicate with the emperor Francis's adit or level, at the depth of nearly 200 fathoms. At a still greater depth is the adit of Joseph II., a magnificent work, 12 mining ft. in height by 10 ft. in breadth, extending from Schemnitz to the valley of the Gran, a distance of nearly 10 Eng. m. This adit carries off the water from mines which cannot now be wrought, and is so constructed that it may be used either as a canal or a railway. Dr. Clarke, who descended into the mines of Schemnitz (*Travels*, viii. 393), says, 'All the imperial mines are connected with each other, offering, in their whole extent, a subterranean passage which reaches to the astonishing length of 8,000 fathoms, nearly $3\frac{1}{2}$ m.! The sight of the interior of the Paquerstohl (one of the mines) convinced us that there are no mines in the world like those of Hungary. How wretched, in comparison, appear the mines of Cornwall and Wales, where it is sometimes necessary to creep upon the hands and knees, wet through, over all sorts of rubbish, to get from one shaft to another. The inside of a Hungarian mine may be compared to the interior arrangement of one of our best frigates, where space has been so husbanded, and cleanliness so strictly maintained, that nothing is seen out of its place, and there is room enough for every operation.' Dr. Clarke should, however, have added that the mines of Cornwall and Wales are wrought by private individuals for the sake of profit only, whereas the imperial mines which he visited are wrought at the expense of government, to which profit is a secondary consideration. The ore, besides silver and gold, contains lead, and sometimes iron, copper, zinc, or arsenic. In consequence of the want of wood and water, but little ore is smelted on the spot, being principally sent to Neusohl or Kremnitz. About 20,000 miners are employed in the Schemnitz district.

A school of mining, in imitation of that at Freiburg, was established at Schemnitz in 1760, which has 5 professors and about 200 students, who are all educated free of cost, several of them being also furnished with an annual donation of from 20*l.* to 30*l.*, to assist in their maintenance.

SCHENECTADY, a town or city of the U. States, New York, cap. co. of its own name, on the Mohawk, a tributary of the Hudson, and on the Erie canal, 16 m. NW. Albany, with which it is connected by a railway. Pop. 10,391 in 1860. The compact portion of the city consists of about 20 streets, with a court-house, co-offices, prison, about 9 or 10 churches, several banks, iron and brass foundries, carpet and tobacco factories, a paper-mill, and various superior public schools, the chief of which is Union College. This establishment, founded in 1785, and incorporated in 1794, is now one of the principal institutions for public instruction in the state. It has twelve professors and other instructors, and a library of 13,000 volumes.

The position of the town on the Erie canal makes Schenectady an important entrepôt, and it

to occupy the site of an ancient Mohawk village, and was incorporated in 1798.

SCHIEDAM, a town and port of S. Holland, cap. cant., on the Schie, a tributary of the Maas, 3 m. W. Rotterdam, and 1 m. N. from the Maas. Pop. 15,406 in 1861. Schiedam is well built in the usual style of Dutch towns, and has numerous churches, an exchange, a Latin school, a chamber of commerce and manufactures, and a branch of the Society of Public Good. 'It is conspicuous,' says a traveller, 'both by the smoke which issues from the chimneys of its distilleries and the vast number of windmills by which it is environed. The whole horizon, in fact, in the direction of Schiedam, seems animated with life and bustle. Schiedam is the chief seat of the manufacture of Dutch gin, or Hollands. The quantity of that spirit produced here annually is very great, there being in the town as many as 100 distilleries, while many thousands of pigs are supported by the refuse of the malt employed in the manufacture. The gin of Schiedam is strong, but mild in flavour, and is usually sold in Holland for 9*d.* a bottle, or 4*s.* 6*d.* a gallon; the price of the gallon on its importation into England being increased by freight and duties to about 28*s.* or 30*s.*' Schiedam has rope-walks, building-docks, and a small though convenient port on the Schie. It sends 1 deputy to the states of the prov.

SCHWABACH, a town of Bavaria, circ. Middle-Franconia, 9 m. SSW. Nuremberg, on the railway from Nuremberg to Augsburg. Pop. 6,611 in 1861. The town is walled, and pretty well built, having several Protestant churches, a synagogue, a mint, and a hospital. It is the seat of various manufactures, the principal being that of pins; but there are others of hosiery, hats, gold and silver lace, tobacco, paper, printing types, and Jews' harps. It owes its distinction as a manufacturing town to the influx of emigrants from France, after the revocation of the edict of Nantes.

SCHWARTZBURG-RUDOLSTADT, a principality of Central Germany, between lat. 50° 30' and 51° N., and about 11° W. long., inclosed by the territories of Saxe-Weimar, Coburg, Meiningen, and Hildburghausen. Area, 840 sq. m. Pop. 71,913 in 1861, mostly Lutherans. It comprises a portion of the N. declivity of the Thuringian forest mountains, and is watered by the Schwartz, Ilm, and Saale. It does not yield sufficient corn for home consumption; timber and salt are its principal products. Iron, and a few other metals, are found; and woollen clothes, earthenware, glass, and other kinds of goods are manufactured. Since 1821 the government has been a limited monarchy; the representative body consisting of 5 deputies of the nobility, 5 of the citizens, and 5 of the rural pop. The deputies are elected every 6 years. The parliament has the control of the public funds, and no new law can be adopted without its consent. The principal judicial courts are at Rudolstadt and Frankenhäusen; from which appeal lies to the superior tribunal of Zerbst, in Anhalt-Dessau. Public revenue 205,200*l.* in 1863. The public debt amounted to 154,000*l.* in 1863. This principality furnishes 899 men to the army of the German Confederation. Chief towns, Rudolstadt, the cap., on the Saale, and Frankenhäusen.

SCHWARTZBURG-SONDERSHAUSEN, a principality of Central Germany, between lat. 51° 12' and 51° 26' N., and about long. 11° E., inclosed by territories belonging to Prussia on every side except the W., where it joins a detached district of Saxe-Gotha. Area, 319 sq. m. Pop. 64,895 in 1861, mostly Lutherans. Surface un-

Unstrut, flowing in a W. direction. The lower part of the country yields more corn than is required for home consumption; the higher portion has extensive forests, and timber and potash are amongst its principal products. Iron is found; and forges and hardware factories are the principal manufacturing establishments, though some woollen and linen goods are woven. The government is an unlimited monarchy. Appeal may be made from the judicial courts to the superior court of Zerbst in Anhalt-Dessau. Public revenue, 97,100*l.* in 1863. Public debt, 500,000*l.* Contingent to the army of the Confed., 751 men. Chief towns, Sondershausen, the cap., on the Wipper and Arnstadt. This princip., like the preceding, has one vote in the full diet of the Germ. Confed., and shares the 15th place and one vote in the committee with Oldenburg, and the Anhalt principalities.

SCHWEIDNITZ, a fortified town of Prussian Silesia, cap. circ. finely situated at the Riesengebirge mountains, on the Weistritz, in a fertile and beautiful country, 30 m. SE. Breslau, on the railway from Breslau to Reichenbach. Pop. 15,381 in 1861, excl. of garrison of 2,744 men. The town is well built and strongly fortified, the fortifications, which had been dismantled by order of Napoleon in 1807, having been reconstructed on an improved plan, and rendered more formidable than ever. Its castle, formerly the residence of the Piast dukes, is now a workhouse. It has a magnificent Rom. Cath. church, a fine town-house, a gymnasium, a house of correction, and the usual government offices of the cap. of a circ.; with manufactures of woollens, cottons, and linens. Near it is the castle of Furstenstein, a fine antique feudal edifice, the property of the king of Prussia.

SCHWIERIN. See MECKLENBURG SCHWIERIN.

SCHWYTZ, or **SCHWEITZ** (CANTON OF), one of the 4 forest cantons of Switzerland, which gave its name to the Confederation, in the central part of which it lies, between lat. 46° 50' and 47° 20' N., and long. 8° 30' and 9° E., having N. and NE. the canton of Zurich and St. Gall, E. Glarus, S. Uri and Unterwalden, and W. Zug and Lucerne. Area, 338.3 sq. m. Pop. 45,193 in 1860. Nearly the whole surface is mountainous; the Rossstock rises about 8,200 ft., and the Righi about 6,150 ft. above the sea. The Rossberg, the fall of a portion of which in 1806 had most destructive effects, is partly in this canton and partly in that of Zug. The Sihl and the Muotta are the principal rivers: the former falls into the Lake of Zurich, which forms most part of the N. boundary of the canton, and the latter into the Lake of Lucerne, which limits the canton on the SW. The Linth canal, between the lakes of Wallenstadt and Zurich, runs along its NE. extremity. The soil and climate are more favourable to cattle-breeding than to agriculture, which is much neglected. However, the inhabs. are distinguished by their superior treatment of live stock: the cattle of Schwytz are accounted among the best in Switzerland; and upwards of 20,000 head are annually sent from the S. side of the Alps to depasture on the mountains during summer. Near Kussnacht, on the Lake of Lucerne, the vine is grown, and apples, which produce cider, are tolerably abundant. The forests are extensive, and the supply of turf is all but inexhaustible; cotton thread, and this in very small quantity, is almost the only article of manufacture. The principal exports are cattle, cheese (sent mostly across Mt. St. Gothard), and timber. The transit trade is of little importance; and, on account of the badness of the roads, is mostly confined to the lakes and navigable parts of the river.

The government is a pure democracy, the sovereign power residing in the people at large. The male pop. above 16 years of age form the general assembly at the canton, which meets every two years, on the first Monday in May, at Schwytz, to appoint, by show of hands, the landamman, and other supreme officers, the deputies to the diet. A council of high functionaries and 270 ordinary mems. assembles usually twice a year, to prepare instructions for the deputies, and hear their reports; and another council of 90 mem. is entrusted with the general executive power. The canton is divided into 6 districts, each of which has its own council and tribunal of primary jurisdiction, the decisions of which are final in cases not above the amount of 200 florins. The chief tribunal sits in Schwytz, and is composed of 30 mems., two-thirds of whom belong to the districts of the cap., and the rest to the other districts of the canton. The inhabs. are exclusively R. Catholics, subordinate to the bishop of Chur. Public education is more backward in this than in most other cantons; and it has no public library. At 16, every male inhab. is enrolled in the militia, and Schwytz furnishes a contingent of 602 men to the army of the Confederation, in which it holds the fourth place immediately after the three directorial cantons. Schwytz, the cap. of the canton, at the foot of Mount Mythen, 26 m. SSE. Zurich, had a pop. of 5,742 in 1860.

SCIACCA (an. *Thermae Seluntinae*), a town and seaport of Italy, island of Sicily, prov. Girgenti, on the S. coast, nearly 20 m. SE. the ruins of Selinuntum, and 30 m. NW. Girgenti. Pop. 14,614 in 1862. The town, situated on the declivity of an eminence rising from the bay, is surrounded by an irregular wall, in tolerable repair, with bastions towards the sea, and the castle of Luna at its E. angle. At a distance it has a respectable appearance; but, notwithstanding its large churches, convents, and magazines, it appears to be poverty-stricken.

Some of the famous hot springs, whence the city had its ancient name, are a little without the walls towards the E. But the steam-baths, the construction of which was ascribed, in antiquity, to Daedalus, and now called the Stufe of St. Calogora, are on the summit of an isolated mountain, about 3 m. NE. of the town, and correspond exactly with the description of Diodorus Siculus. They continue, as of old, to be frequented by patients, and consist of several sudorific grottoes, or caverns, the outer one of which has seats excavated in the rock.

Sciacca is one of the principal ports on the S. coast of the island, for the exportation of corn, and the rock upon which the town stands is, in numerous places, hollowed out into *caricatori*, or corn cellars. In summer ships anchor at about 1 m. off town, in from 7 to 12 fathoms, on a bottom of sand and clay, but being exposed to every wind from the SE. round to the W., it is not resorted to in winter, except by boats and flat-bottomed craft.

Agathocles, tyrant of Syracuse, famous alike for his great talents, perfidy, and cruelty, was a native of Sciacca, where he was born *anno* 359 B.C. He was of low origin, his father being a potter banished from Reggio, his native city. Fazelli, the historian of Sicily, was also a native of this town.

SCILLY ISLANDS, a group of islands belonging to England, lying about 30 m. W. by S. from the Land's End; supposed by some to be the *Cassiterides*, or tin islands, of the ancients. They are supposed to be, in all, about 150 islands and rocks, but there are only about half a dozen of any

importance. St. Mary's, the largest, is said to contain about 1,640 acres: the entire area of the group, as given in the population returns, is only 5,570 acres. In 1861, they had a pop. of 2,431. From their situation they necessarily have a mild equable temperature, and though fogs are common, the islands are very healthy. They produce good barley, rye, and oats, the latter being principally of the variety called *pillar*, or *avena nuda*. Potatoes are extensively cultivated. Horses and cattle small; sheep numerous, and of good quality; sea-fowl are found in great numbers, and partridges are, also, abundant. There are shrubs, but few or no trees. The inhabitants make great quantities of kelp; they are also expert fishers, and act as pilots to such ships as require their services. As already stated, the islands are generally supposed to be the *Cassiterides*, or tin islands of the ancients. But it is most probable that the W. extremity of Cornwall was included under this term; and, at all events, there is now no trace of tin, nor, indeed, of mines of any sort, in any of the islands. Heugh-town, the capital of the islands, and their only town, is situated on the W. side of St. Mary's. It has a pier and a custom-house, and is a place of some consequence, being defended by a fort, called the Star Castle, with a small garrison.

Persons accused of felonies are sent to Cornwall to be tried at the co. assizes; but all minor offences and civil suits are tried by a court consisting of twelve of the principal inhabitants, delegated by the proprietor of the islands under the duchy of Cornwall, of which they form a part. This court sits once a month at Heugh-town, St. Mary's, for the trial of cases. Vacancies in it are usually filled up by election, but it may be dissolved and a fresh appointment made by the proprietor.

The position of the Scilly Islands renders them of very considerable importance in navigation. Lying at the point of junction, as it were, of the English and St. George's Channels, ships passing from the one to the other, should the wind be unfavourable, often take shelter under these islands: it is sometimes, also, convenient for vessels to take shelter among them, rather than beat about at sea in bad weather, and a strong gale from the E. usually brings in numerous vessels. There are four principal sounds or roads among the islands, exclusive of smaller inlets. Of the roads, St. Mary's, between the islands of St. Mary and St. Agnes, is the best; but it is generally the safest plan in entering it, or any of the other roads, to make use of pilots. The latter are always in readiness to offer their services.

A lighthouse of the first class was erected on St. Agnes Island, the most southerly of the group, in 1680, the lantern of which is elevated 138 ft. above high water mark. It is, according to the Ordnance survey, in lat. $49^{\circ} 58' 38''$ N., long. $6^{\circ} 19' 28''$ W.

But, notwithstanding the warning given by this light, these islands have been the scene of numerous shipwrecks. The most distressing of these catastrophes took place on the night of the 22d of Oct. 1707, when the fleet from the Mediterranean, under the gallant Sir Cloudesley Shovel, got foul of the islands: the ship bearing the flag of the admiral and two other line-of-battle ships struck upon the rocks near the lighthouse, and were totally lost, with every soul on board. Some of the other ships were in extreme danger. It is not exactly known how the accident arose. The night was dark, but there was very little wind, otherwise the whole fleet must have been destroyed. It is probable that the light

had been mistaken for another. The body of the admiral was cast ashore, and buried in St. Mary's, but it was soon after removed to Westminster Abbey, where a monument, creditable to the liberality, though not to the art of the nation, was erected to his memory.

SCIO (an. *Chios*), a celebrated and beautiful island of the Aegean Sea, belonging to the Turks, about 5 m. W. from Cape Blanco, in Asia Minor; Chio, its chief town, on its E. side, 53 m. W. Smyrna, being in lat. $38^{\circ} 22' 30''$ N., long. $26^{\circ} 9'$ E. It is about 32 m. in length N. and S., and where broadest, about 18 m. across. Though for the most part mountainous and rugged, it has a considerable extent of level and gently sloping ground. Its climate is mild and delightful, and it has numerous fine springs and rivulets. Dr. Clarke says it is the 'paradise of modern Greece; more productive than any other island, and yielding to none in grandeur.' (III. 236, 8vo. ed.) In antiquity and in modern times, down to the late dreadful catastrophe, it was cultivated with the greatest care and assiduity. Owing to the limited extent of the arable land, and the greater suitability of the soil for other crops, the principal part of the corn required for the use of the inhab. has always been brought from the ports on the Black Sea and other marts. The staple articles of produce are silk, mastic, figs, lemons, and oranges, wine, oil, cotton, and almonds. Its mineral wealth has been but little explored, but it contains abundance of marble, jasper, and a kind of green earth, resembling verdigris.

The wines of Chios, especially those produced in the district of *Arvisia*, were amongst the most esteemed of any in the ancient world. They have been celebrated by Virgil (Ecl. v. lin. 72); and Horace asks

'Quo Chium pretio cadum
Mercemur?'

According to Pliny, Chian wine was served up by Julius Caesar at his most splendid entertainments; and it is thought worthy of notice, that Hortensius left a very large stock of this famous beverage to his heir. (Hist. Nat., lib. xiv. cap. 14, 15.) The wine of the island still preserves some portion of its ancient celebrity, but the produce is scanty, and it is said to be injured by transportation. Mastic is the most esteemed of the modern products of the island, being in great request among the Turkish ladies. All the mastic trees are supposed to be the property of the grand seignior, or rather of the sultana mother, of whom this island is the peculiar demesne. But formerly the trees were left, with the island itself, to the inhabitants, with but little interference on the part of the Turks, on condition of their annually furnishing a certain quantity of mastic to the cadi for the use of the imperial seraglio, and paying a moderate capitation tax. And it is to the comparative exemption it has thus enjoyed from Turkish despotism, that the sprightly vivacity of its inhabitants, and their greater industry, enterprise, and prosperity, are to be ascribed. Besides its chief city, the island had, previously to its late calamity, several considerable towns and numerous villages. The population, which was very dense, has been variously estimated at from 80,000 to 150,000, of whom from 30,000 to 35,000 belonged to the capital.

The latter, on the E. coast of the island, constructed by the Genoese, along the seashore at the foot of the mountains (an. *Pellenæi Montes*) on the slope of which stood the ancient city, is well built, extending, with its gardens and villas, for about 4 m. along the sea. Its houses are commodious, and its shops and warehouses well fur-

SCOTLAND.

English Miles

5 10 20 30 40 50



SHEPHERD ISLES
on the same Scale as Map.

IRELAND

Longitude West 5 from Greenwich

nished; there are numerous Greek and R. Cath. churches, with schools, and a college.

In 1822, during the progress of the revolutionary struggle in Continental Greece, a Greek force landed in the town, and a part of the inhab., who had hitherto pursued a strict neutrality, having joined them, they attacked and took the citadel, defended by a small Turkish garrison, which they put to the sword. A strong Turkish force having landed immediately after, took the most desperate revenge for the outrage that had been committed. The island was given up to indiscriminate pillage and massacre. The inhab., taken by surprise, and enervated by long peace and prosperity, offered no effectual resistance to their murderous assailants. It is said that above 20,000 individuals were put to the sword; that as many more, principally women and children, were carried off and sold as slaves; and that the capital was converted into a heap of ruins, and every part of the island laid waste. These statements are most probably a good deal exaggerated; but still there cannot be a doubt that the visitation was of the most destructive and tremendous description. Such of the principal inhab. as were fortunate enough to escape being massacred, immediately fled from the island; and that commerce which had been its principal support has been transferred, to a great extent, to Syra, Napolé, and other places.

In antiquity, Chios gave birth to many distinguished individuals; among whom may be specified Ion, the tragic poet, Theopompus, the historian, Theocritus, the sophist, and Metrodorus, the physician and philosopher. But Chios aspires to a still higher honour, that of being the native country of the first and greatest of poets,

'The blind old man of Chio's rocky isle,'

of whom Velleius Paterculus has justly as well as forcibly said,—*'quod neque ante illum, quem ille imitaretur; neque post illum, qui eum imitari posset, inventus est.'* (Lib. i. cap. 5.) And it is admitted by the ablest critics that, of all the cities that contended for the honour of having been the birth-place of Homer, the claims of Chios and Smyrna were apparently the best founded.

The Chians were, for some time, in possession of the empire of the sea. They are said to have been the first who traded in slaves; and the oracle, informed of the fact, declared that it had drawn upon them the anger of heaven; one, says Barthelmi, of the noblest, but at the same time least regarded, answers the Gods have communicated to man. The Chians took a prominent part in the great revolt of the Ionian cities against the Persians, by whom they were afterwards reduced, and punished with great severity. At a subsequent period we sometimes find them on the side of the Athenians, and sometimes on that of the Lacedæmonians. 'Moderate in prosperity, blameless towards their neighbours, and using their increasing wealth and power for no purpose of ambition, but directing their politics merely to secure the happiness they enjoyed,' the Chians were amongst the most respectable of the Greek states. (Mitford iii. 316, 8vo. ed.) They became the allies of Rome during the wars with Mithridates. After innumerable vicissitudes Scio came, in the middle ages, into the possession of the Genoese, who, as already stated, built its capital. It was taken by the Turks in the 16th century.

SCOTLAND, one of the secondary European kingdoms, comprising the Northern and smaller portion of the island of Great Britain, and forming one of the three great divisions of the United Kingdom of Great Britain and Ireland, between lat. 54° 38' and 58° 40' 30" N. and long. 1° 46' 30"

and 6° 3' 30" W., or, including the Hebrides, 7° 44' W. It is surrounded by the ocean on all sides, except on the S., where it is separated from England by the Solway Frith, the Cheviot Hills, and the Tweed. Its greatest length, N. to S., from Dunnet Head to the Mull of Galloway, may be estimated at about 280 m.; its breadth is very unequal, varying from 32 m., between Alloa on the Frith of Forth and Dumbarton on the Clyde, to 146 m. between Buchaness Point in Aberdeenshire and Rowanmoan Point in Ross-shire.

Scotland has an area of 30,328 square miles, with a population, in 1861, of 3,062,294 souls, giving 101 inhabitants to the square mile. It is consequently—see table of 'Density of Population of the European States'—one of the thirty inhabited countries of Europe, the population of Belgium being four times, and of England and Wales more than four times as dense.

The following table shows the result of the census of April 8, 1861, together with the population of 1851. The numbers include the military in barracks and the seamen on board vessels in the harbours and creeks of Scotland on the night of April 7, 1861:—

| | 1851 | 1861 |
|--------------------------------|-----------|-----------|
| Scotland | 2,888,742 | 3,062,294 |
| COUNTRIES | | |
| I. Northern Division. | | |
| 1. Shetland | 31,078 | 31,678 |
| 2. Orkney | 31,455 | 32,416 |
| 3. Caithness | 38,709 | 41,216 |
| 4. Sutherland | 25,793 | 25,208 |
| II. North-Western Division. | | |
| 5. Ross and Cromarty | 82,707 | 81,280 |
| 6. Inverness | 96,500 | 87,435 |
| III. North-Eastern Division. | | |
| 7. Nairn | 9,956 | 10,065 |
| 8. Elgin or Moray | 38,959 | 42,692 |
| 9. Banff | 54,171 | 59,234 |
| 10. Aberdeen | 212,032 | 221,380 |
| 11. Kincardine | 34,598 | 34,461 |
| IV. East Midland Division. | | |
| 12. Forfar | 191,264 | 204,365 |
| 13. Perth | 138,660 | 139,511 |
| 14. Fife | 153,546 | 154,555 |
| 15. Kinross | 8,924 | 7,975 |
| 16. Clackmannan | 22,951 | 21,449 |
| V. West Midland Division. | | |
| 17. Stirling | 86,237 | 91,926 |
| 18. Dumbarton | 45,103 | 52,035 |
| 19. Argyll | 80,298 | 80,995 |
| 20. Bute | 16,608 | 16,188 |
| VI. South-Western Division. | | |
| 21. Renfrew | 161,091 | 177,407 |
| 22. Ayr | 189,858 | 198,959 |
| 23. Lanark | 530,169 | 631,559 |
| VII. South-Eastern Division. | | |
| 24. Linlithgow | 30,135 | 38,845 |
| 25. Edinburgh | 259,435 | 273,869 |
| 26. Haddington | 36,386 | 37,623 |
| 27. Berwick | 36,297 | 36,614 |
| 28. Peebles | 10,738 | 11,408 |
| 29. Selkirk | 9,809 | 10,449 |
| VIII. Southern Division. | | |
| 30. Roxburgh | 51,642 | 54,109 |
| 31. Dumfries | 78,123 | 75,877 |
| 32. Kirkcudbright | 43,121 | 42,430 |
| 33. Wigtown | 43,389 | 42,038 |

Scotland is extremely irregular in its surface and outline, and, compared with England, may be said to be sterile, rugged, and mountainous. With the exception of a few rich alluvial tracts, there are no extensive vales in Scotland; its surface, even where least mountainous, being generally varied with hill and dale. It is divided by the Frith of Clyde, Loch Lomond, and the Grampians, into the two grand divisions of the Highlands and Lowlands; the former comprising the N. and the

latter the S. part of the country. The Highlands again are divided into two unequal parts by the remarkable narrow and deep valley through which the Caledonian Canal has been constructed. The arable lands in the Highlands are mostly confined to the E. parts of Ross and Cromarty, a slip along the S. side of the Moray Frith, and the E. parts of Aberdeenshire. With these exceptions, the far greater part of the Highlands consists of mountains, moors, and morasses; and in various parts, especially along the W. coast, they are extremely bleak and barren. In Caithness there is a considerable extent of low ground, but it is mostly moor. The Lowland division of the country comprises, also, a large extent of mountainous districts; but the mountains are not so lofty nor so bleak and rugged as in the Highlands, and there is a much greater extent of low fertile land.

The mountains of Scotland run generally in chains from SW. to NE., though there are many detached groups not following this distribution. They are frequently rocky, bare, and precipitous; though mostly covered with heath. The principal and most celebrated chain is that of the Grampians, which comprises nearly all the highest of the Scottish mountains, except Ben Nevis. This stony girdle extends across the island from the arms of the sea, called Loch Etive and Loch Fyne, in Argyleshire, E. by N. to Stonehaven on the E. coast, and Echt, in Aberdeenshire, forming, as already stated, in the greater part of its course, the line of demarcation between the Highlands and Lowlands, and separating the waters which flow into the Forth, Tay, and South Esk, from those which join the Spean, Spey, and Dee. Its most elevated summits are near the head of the Northern Dee. Ben Macdui, 11 m. NW. Braemar, lat. $57^{\circ} 6' N.$, long. $3^{\circ} 37' W.$, 4,390 ft. above the level of the sea, is at once the culminating point of the Grampians, and the highest of the British mountains, being 20 ft. higher than Ben Nevis, which was long considered as the highest of the Scotch mountains, and 819 ft. higher than Snowdon in Wales. The other principal summits in the Grampian chain are Cairntoul, 4,215 ft.; Cairngorm, 4,095 ft.; Ben Lawers, 3,945 ft.; Ben Avon, 3,967 ft. in height, &c. Ben Lomond, in Stirlingshire, 3,195 ft. in height, on the E. side of Loch Lomond, the best known of all the Scottish mountains, also belong to this chain. The Grampians are distinguished by their sterility and desolate aspect, their sides in many places exhibiting vast perpendicular ledges of rock. The principal passes through the chain are those of Aberfoyle, Leni, Glenshie, and Killiecrankie.

Ben Nevis, alluded to above, lies to the NW. of this chain, in about $56^{\circ} 49' 30'' N.$ lat., long. $5^{\circ} W.$, being separated from the Grampians by the moor of Rannoch. It rises to an elevation of 4,370 ft. above the sea. Its summit, which commands a magnificent view extending from the Paps of Jura to Cuchullin in Skye, Cairngorm, and Ben Macdui, is, during the greater part of the year, covered with snow. From Ben Nevis N. to Loch Broom several mountains rise to nearly 4,000 ft. in height; and the country is so thinly inhabited that frequently, for many miles, not a house is visible. But from Loch Broom to Cape Wrath the surface diminishes considerably in elevation, and, though bleak in the extreme, is, for some distance from the W. coast inland, not more than about 1,000 ft. above the sea.

In the Lowlands, the Sidlaw and Ochill hills, which run parallel to the Grampians, nowhere rise to 2,500 ft. Indeed, Broadlaw, on the N. border of Dumfriesshire, the highest mountain in

The more elevated tracts in the Lowlands, including the mountains of Roxburgh, Dumfries, Peebles, Selkirk, and Lanark shires, are frequently smooth, and covered with a fine sward, affording a good pasturage for sheep.

Though the valleys and level tracts in Scotland be few and of limited extent, as compared with those of England, some of them are extremely fertile, and they are mostly well cultivated. The carse of Stirling and Falkirk, on the banks of the Forth; that of Strathearn and Gowrie, on the Tay; and the merse of Berwickshire, all low alluvial tracts, are not inferior, in point of productiveness, to any land of the empire. Teviotdale, or the low lands along the Teviot; Tyne-dale, or the low lands along the Tyne, in E. Lothian; the How of Fife, or the low ground along the Eden in Fifeshire; and Strathmore, or the low grounds between the Grampian mountains and the Ochill hills, consist, for the most part, of rich loamy soil, and are extremely well farmed. It should also be observed that the general inequality of the surface makes the lower parts of the country appear to be much less fruitful than they really are; the hollows between the small eminences being often extremely fertile, and the eminences themselves, even when they are unsuceptible of tillage, frequently furnish excellent pasture. This is particularly the case in the SW. counties; large tracts of land in Galloway and Dumfriesshire, that let from 20s. to 80s. an acre and upwards, would appear to one not well acquainted with the country and its capabilities worth little or nothing. A good deal of level but generally high-lying land, especially in the Highlands, and in some parts also of the Lowlands, consists of moors; having for the most part a clay subsoil, covered with peat earth or moss impregnated with water, not unlike the bogs of Ireland. Many of these moors are of very considerable extent; the largest probably, as well as the most desolate and worthless, is the moor of Rannoch, to the S. of Ben Nevis, comprised in the shires of Argyle, Perth, and Inverness.

Rivers.—Scotland has numerous rivers, several of which are of considerable size. They differ from those of England in being more precipitous, rapid, interrupted by cataracts, and subject to sudden overflowings. Except the Clyde, the others mostly disembogue on the E. coast. The Tweed, which rises on the confines of Dumfriesshire and Lanarkshire, falls into the N. Sea at Berwick, after a course of about 100 m., only a small portion of which is navigable. Proceeding northwards, the next river of any considerable magnitude is the Forth, which rises on the E. side of Ben Lomond, and has, in general, an easterly, but very tortuous course to Kincardine, where it unites with its great æstuary, or rather arm of the sea, the Frith of Forth, the *Bodotria* of Tacitus. It receives on its N. side the Teith and Allan, and from the S. the Devon; Aberfoyle, Stirling, and Alloa are on its banks. The Forth is rapid for some considerable distance from its source; but during the greater part of its course it runs through a flat country with many windings: vessels of 300 tons ascend the Forth as far as Alloa, and those of 70 tons ascend to Stirling. It is connected with the Clyde by the great canal from Grangemouth to Douglass. The Tay is the largest of Scotch rivers, and is supposed to carry more water to the sea than the Thames, or any other river in Great Britain. (See TAY.) The N. and S. Esks, Dee, Don, Spey, and Findhorn, all discharge themselves on the E. coast; and in the N. division of the Highlands are the Nairn, Ness, and Beaulv. The

certainly the most rapid. It rises in Loch Spey, and pursues mostly a NE. course to the Moray Frith, which it enters after a course of about 96 m. It receives no large tributary, but innumerable mountain torrents, in consequence of which it is subject to frequent and destructive inundations. The Clyde, the *Glotta* of Tacitus, though not the largest, is decidedly the most important Scotch river in a commercial point of view, Lanark, Hamilton, and Glasgow being situated on its banks. It rises in the highest part of the Lowlands, close to the sources of the Tweed and Annan; and runs at first N., but afterwards generally NW., to the Frith of Clyde, with which it unites 7 or 8 m. below Glasgow, after a course of between 70 and 80 m. It receives from the S. the Douglas, Nethan, Avon, Cart, &c.; and from the N., the Kelvin and Leven. The Clyde has been rendered navigable for vessels of above 1,000 tons, as far as Glasgow. (See CLYDE and GLASGOW.) The Southern Dec, Nith, and Annan, flowing into the Solway Frith, are the only other streams it is necessary to notice.

The *lochs*, or fresh-water lakes of Scotland, are numerous, and highly distinguished for their picturesque scenery. Loch Lomond is the largest lake in Great Britain; being about 24 m. in length, and from 7 m. to $7\frac{1}{2}$ m. across in the broadest part. It is estimated to cover about 25,000 acres. Lochs Awe, Ness, Marec, Tay, and Shin, in the shires of Argyle, Ross, Perth, and Sunderland, are among the other principal lakes. Most of these are long, narrow, and deep, filling up the bottoms of the valleys between the mountains. They abound with trout, perch, and pike; but Loch Leven, in Kinross-shire, is the only lake that yields any revenue to its proprietors.

The coasts of Scotland are mostly bold and rocky; and on the W. side, in particular, they are very much indented by arms of the sea, termed friths, and lochs, that extend far inland, and, for the most part, carry deep water to their very head. These friths and inlets are of considerable importance in a commercial point of view, especially as few of the rivers are navigable to any great distance inland. On the E. coasts are the Friths of Forth and Tay, which, especially the first, are of great importance, as affording facilities of communication to the richest districts of the country; N. of the latter, on the same coast, are the friths of Moray, Dornoch, and Cromarty: on the W. coast, the Frith of Clyde, and Lochs Broom, Torridon, Linnhe, and Fyne, deeply indent the country. The harbours of Leith, Grangemouth, Queensferry, and Burntisland are in the Frith of Forth, and those of Dundee and Perth in the Frith of Tay. Between the Tay and Buchan Ness are the harbours of Montrose, Aberdeen, and Peterhead: the Frith of Cromarty, N. of Buchan Ness Point, is unquestionably the best asylum for shipping on the E. side of Great Britain, and one of the finest, indeed, that is anywhere to be met with. Between the latter and Duncansby Head are the small harbours of Wick and St. Clair's Bay. From Cape Wrath to the Clyde, the narrow arms of the sea, though deep and secure, are little frequented. The ports of Greenock and Glasgow are the principal in the Frith of Clyde, and enjoy an extensive trade; but Lamlash Bay, on the E. side of the Isle of Arran, is the best harbour in this neighbourhood. There are some pretty good harbours on the coasts of Wigtown and Kirkcudbright shires. The principal headlands are St. Abb's Head, Fife Ness, Peterhead, Tarbet Ness, and Duncansby Head, on the E.; Dornoch Head and Cape Wrath, on the

and Cantire, on the W., and the Mulls of Galloway and Burrowhead, on the S. coast.

There are few or no islands off the E., but many of large size lie contiguous to and off the W. coast. These are mostly included under the Hebrides. The islands of Orkney and Shetland lie off the N. coast of Scotland; the Orkneys, the nearest, being separated from the mainland by the Pentland Frith, 6 m. across.

General Aspect of the Country.—The finest parts of the low country of Scotland usually want the rich luxuriance of an English landscape. Within the last sixty or seventy years, a great deal has, no doubt, been done in the way of raising plantations; and the strictures of Dr. Johnson, as to the deficiency of wood, would at present be quite inapplicable, however just they may have been when dictated. In Scotland, however, plantations are not spread generally over the country, but are mostly congregated in the neighbourhood of gentlemen's seats, while in many large tracts they are wholly wanting. In most parts, too, we look in vain for those hedgerow trees that give so much of a woody appearance to the S. part of the island. Generally, also, the inclosures are a good deal larger than in England; and the fences being either stone walls (dykes) or hedges, that occupy only a small space of ground, having little of the breadth and roughness of those of England, the country, however well farmed, seems to an Englishman deficient in vegetation and verdure, and cold and comfortless. On the other hand, however, the succession of new objects presented by the unevenness of the surface, the rude grandeur of the mountains that everywhere bound the prospect, and the striking contrast frequently afforded between rich, well-cultivated, low grounds, and the contiguous high barren ridges, take from the Scottish landscape the tameness and monotony that prevail in many parts of England, and render it singularly picturesque and impressive.

Climate.—Scotland has a more rigorous climate than England; but owing to the proximity of most parts of the country to the sea, and the numerous friths and deep bays by which it is penetrated, it is less severe than might, from the lat., be expected. The mean annual temperature of places near the level of the ocean, throughout the country, averages about $46\frac{1}{4}^{\circ}$ Fah. At Edinburgh, which is from 300 to 400 ft. above the sea-level, the mean temperature of the year is $47\cdot8^{\circ}$, which may be taken as that of the inland parts generally in the S. of Scotland, the mean of the coldest month being $38\cdot3^{\circ}$, and of the warmest $59\cdot4^{\circ}$. A great deal of rain falls in Scotland, but very unequally; for on the E. coast it ranges from 22 to 30 in.; whereas, on the W. coast and in the Hebrides, it ranges from 30 to 44 in. The average fall of rain in Edinburgh is about $23\frac{1}{2}$, and in Glasgow about $29\cdot65$ in. Excess of humidity, and the occurrence of heavy rains in August, September, and October, and of cold piercing E. winds, especially along the E. coast, in the months of April, May, and the first half of June, are the great drawbacks on the climate of Scotland. It is rare, indeed, that the crops suffer from heat or drought; but they frequently suffer from wet and from violent winds, especially in the W. part of the country. The climate is, however, highly salubrious, and favourable alike to longevity, and to the development of the physical and mental powers.

Geology.—A line drawn in a NE. direction from the mouth of the Clyde to Stenhaven, on the E. coast, separates the two principal geological re-

composed of primary rocks, granite, gneiss, mica-slate, covered at the foot of the mountain chains with beds of conglomerate and red sandstone; whereas the second, to the S. of the above line, is the region of transition formations, in which rocks of that kind mostly prevail, overlain in various parts by trap, red sandstone, and coal beds; granite is, however, largely developed in the SW. part of the kingdom, in the stewartry of Kirkcudbright, at Criffel, and in the Cairnsmuir range. Little if any coal exists in the primary division of the country; few metals are discovered there, and its most important mineral products are building-stone and roofing-slate. Some lead mines are, however, wrought at Strontian, in Argyllshire; and in Inverness-shire plumbago of inferior quality has been found, imbedded between laminæ of mica slate. None of the secondary calcareous formations, so extensively prevalent in England, have been found in Scotland, nor any tertiary formations.

Coal and Iron.—The great coal district of Scotland may be considered as bounded on the N. by a line drawn from the mouth of the Tay to the N. extremity of the Isle of Arran, and on the S. by another line drawn from St. Abb's Head to Girvan, in Ayrshire. These limits comprise a band of country, in which are several large coal-fields detached from each other, the most valuable extending along the banks of the Forth, with a breadth of from 10 to 12 m. on either side the river. The Edinburgh coal-field, to the S. and E. of that city, occupies an area of 80 sq. m.; and from Bathgate the coal deposits extend W. to Glasgow and Paisley, and have, in fact, been the principal cause of the wonderful progress made by the former in manufactures, wealth, and population. There are several small detached coal-fields in Ayrshire and some of the other S. counties. Iron is of frequent occurrence in the coal districts, especially in Lanarkshire, where the ores are of the very best quality; and the iron trade of that county, and of Scotland generally, has latterly increased with unexampled rapidity, and is now of the greatest importance. The subjoined table shows the quantity of coals raised, and the number of collieries in each of the eleven years from 1853 to 1863:—

| Years | No. of Tons of Coals raised | No. of Collieries |
|-------|-----------------------------|-------------------|
| 1853 | 7,132,000 | .. |
| 1854 | 7,448,000 | 368 |
| 1855 | 7,325,000 | 403 |
| 1856 | 7,500,000 | 405 |
| 1857 | 8,211,473 | 425 |
| 1858 | 8,926,249 | 417 |
| 1859 | 10,800,000 | .. |
| 1860 | 11,149,424 | 413 |
| 1861 | 11,091,000 | 424 |
| 1862 | 12,200,000 | 448 |
| 1863 | 12,300,000 | .. |

Of the 12,300,000 tons of coal raised in 1863, there were raised in the eastern district (including Fife, Perth, Clackmannan, Haddington, Edinburgh, Peebles, Linlithgow, the eastern part of Stirlingshire, and the middle and upper wards of Lanarkshire) 6,000,000 tons; and in the western district (including Ayr, Dumfries, Renfrew, Dumbarton, the western part of Stirlingshire, and the lower ward of Lanarkshire, with the parish of Old Monkland), 6,300,000 tons. In 1862, the number of collieries in the eastern districts was 247, viz. in East Lanarkshire 121, in Fifeshire 46, in Clackmannanshire 8, in Haddingtonshire 13, in Kinrossshire 1, in Edinburghshire 17, in Linlithgowshire 17, in East Stirlingshire 21, in Peeblesshire 1, and

in Perthshire 2. The number in the western district was 201, viz. in West Lanarkshire 63, in Ayrshire 91, in West Stirlingshire 20, in Dumbartonshire 13, in Renfrewshire 9, in Argyllshire 1, and in Dumfriesshire 4.

The number of tons of ironstone raised in Scotland in 1863 was 2,750,000 (viz. 1,000,000 tons in the eastern district, and 1,750,000 in the western district).

The number of tons of iron-ore raised in Scotland, was 2,201,250 in 1856, 2,500,000 in 1857, 2,312,000 in 1858, 2,225,000 in 1859, 2,150,000 in 1860, 1,975,000 in 1861, 1,500,000 in 1862. The estimated value in 1862 was 500,000*l.* The number of tons raised in the United Kingdom was 10,493,311 in 1856, 9,573,281 in 1857, 8,040,959 in 1858, 7,876,581 in 1859, 8,024,204 in 1860, 7,215,518 in 1861, 7,562,240 in 1862. The estimated value at the place of production was 3,829,312*l.* in 1857, 2,570,701*l.* in 1858, 2,507,860*l.* in 1859, 2,466,929*l.* in 1860, 2,302,371*l.* in 1861, 2,399,740*l.* in 1862.

The number of iron-works in Scotland in 1862 was 31, the number of furnaces built 171, the number of furnaces in blast 125 (viz. 33 in Ayrshire, 76 in Lanarkshire, 6 in Fifeshire, 4 in Linlithgowshire, 6 in Stirlingshire). There was 1 iron-work with 3 furnaces in Clackmannanshire, 1 iron-work with 1 furnace in Haddingtonshire, 1 iron-work with 1 furnace in Argyllshire; but none of these 5 furnaces was in blast in 1862. The number of furnaces in blast in the United Kingdom in 1861 was 561 (viz. 306 in England, 120 in Wales, 125 in Scotland).

The number of tons of pig iron made in Scotland was 880,500 in 1856, 918,000 in 1857, 925,500 in 1858, 960,550 in 1859, 937,000 in 1860, 950,000 in 1861, 1,080,000 in 1862. The number of tons made in the United Kingdom was 3,586,377 in 1856, 3,659,447 in 1857, 3,456,064 in 1858, 3,712,904 in 1859, 3,826,752 in 1860, 3,712,890 in 1861, 3,943,469 in 1862. The estimated value was 14,845,508*l.* in 1856, 12,838,560*l.* in 1857, 10,713,798*l.* in 1858, 11,188,712*l.* in 1859, 11,480,256*l.* in 1860, 9,280,975*l.* in 1861, 9,858,672*l.* in 1862.

The mean average price of Scotch pig iron was 3*l.* 19*s.* 7*d.* a ton in 1854; 3*l.* 10*s.* in 1855; 3*l.* 12*s.* 8*d.* in 1856; 3*l.* 9*s.* 2*d.* in 1857; 2*l.* 14*s.* 4*d.* in 1858; 2*l.* 11*s.* 9*d.* in 1859; 2*l.* 18*s.* 6*d.* in 1860; 2*l.* 9*s.* 7*d.* in 1861; 2*l.* 14*s.* in 1862. The exports of Scotch pig iron were 254,245 tons in 1859; 255,388 in 1860; 266,871 in 1861; 269,701 in 1862. Of the 1,080,000 tons made in 1862, 308,212 tons were sent to England and Ireland, 269,701 were sent to foreign countries, and 502,087 were used in Scotch forges.

There were 12 iron mills and forges in Scotland in 1862, having 350 puddling furnaces, and 44 rolling mills. The number of iron mills and forges in the United Kingdom was 221, having 4,832 puddling furnaces, and 647 rolling mills.

Gold has been occasionally found in the streams near the lead hills in Lanarkshire, and elsewhere, and silver has been met with in various places; but the precious metals are not so abundant as to defray the expense of seeking for them.

Next to iron, lead and copper are the most valuable metals. The mines of Wanlockhead and Leadhills, on the borders of Lanarkshire and Dumfriesshire, furnish annually about 1,000 or 1,100 tons lead, and the produce of the mines in Ayrshire and Kirkcudbright amounts to about as much more. Small quantities of cobalt, bismuth, and manganese are met with. Scotland produces marble in great variety, and of very superior quality, slates, excellent building stone, and many

varieties of *gema*. Brick is but little used in building, the houses being almost everywhere of stone.

Scotland is supposed to possess about 3,230 indigenous plants, of which 870 are dicotyledonous, 280 monocotyledonous, and 2,080 cryptogamic. Most of the forest trees of England are met with. In the Highlands are several extensive forests of pine (*Pinus sylvestris*), covering the valleys, and ascending to an elevation of 2,500 ft. up the mountains. Apples, pears, plums, peaches, and apricots ripen in the open air as far N. as Inverness, and in warm sheltered situations to the N. extremity of the kingdom. The sea-weed, which grows in great profusion round the coasts, used to be extensively manufactured into kelp, and the business, though much diminished, in consequence of the preparation of *soude factice* (artificial soda), is still carried on to a considerable extent.

The *wild animals* of Scotland are mostly the same as those of England, including the stag, wild roe, hare, rabbit, fox, badger, otter, wild cat, and hedgehog, though some of these are becoming scarce. The wolf and beaver, formerly natives of the country, have been long extinct; and the only existing remains of the *urus*, or native breed of cattle, are restricted to a few preserved in the Duke of Hamilton's park, near Hamilton. One of the domestic animals peculiar to Scotland is the *colley*, or true shepherd's dog, and many specimens of the unmixed breed are extant. Several species of eagles and other birds of prey, and aquatic birds in great numbers, inhabit the rugged coasts, and the pheasant, ptarmigan, black-cock, grouse, and partridge abound inland. The noble species of game called the capercailzie, or cock of the wood (*Tetrao urogallus*), was formerly abundant in Scotland; but it appears to have been exterminated about 1760. Within these few years, however, it has been re-introduced by the Marquis of Breadalbane, the Earl of Fife, and other extensive forest proprietors; and there can be no doubt that, if properly protected, it will succeed very well; but it is too obvious and tempting a mark for the poacher to maintain itself. Scotland has also most of the English singing birds, except the nightingale, which is rarely, indeed, found N. of the Trent. The fish are similar to those of England: the rivers teem with the finest salmon and trout; and the salmon fisheries of the Tay, Tweed, Forth, and Spey are highly valuable.

Fisheries.—The salmon fishery is the most important of what may be called the domestic fisheries, and, since 1790, London has received the greater part of her supply of salmon from Scotland, considerable quantities being also sent to Liverpool. The fish are brought up, even in the hottest weather, quite fresh, being packed in pounded ice. Previously to the introduction of this plan, salmon used to be consumed principally in the country where it was taken; and, in some parts of Scotland, domestic servants used to stipulate that they should not be obliged to dine on salmon more than three or four times a week. The salmon fisheries seem to have attained their maximum value towards the end of the French war, when the fisheries in the Tweed were let for from 15,000*l.* to 18,000*l.* a year, and those of the Tay, Dee, and Spey were proportionally valuable. But the value of the Scotch salmon fisheries has, speaking generally, declined greatly of late years; in consequence principally of a diminished supply of fish in the rivers, but, in some degree, also, from the greater facility of communication between London and Liverpool, and the consequent importation of Irish salmon into London, and more

lowly shows the number and the value of the salmon fisheries in each county of Scotland, in so far as entered on the valuation rolls for the year 1863:

| Counties | No. | Value | Counties | No. | Value |
|------------------|-----|--------|----------------|-----|--------|
| Aberdeen . . . | 185 | £5,150 | Kinross . . . | .. | .. |
| Argyll . . . | 25 | 974 | Kirkcudbright | 20 | £1,576 |
| Ayr . . . | 23 | 982 | Lanark . . . | .. | .. |
| Banff . . . | 14 | 3,063 | Linlithgow . . | 6 | 221 |
| Berwick . . . | 20 | 1,075 | Nairn . . . | 10 | 98 |
| Bute . . . | .. | .. | Orkney . . . | .. | .. |
| Caithness . . . | 11 | 995 | Peebles . . . | .. | .. |
| Clackmannan . . | 7 | 220 | Perth . . . | 110 | 11,414 |
| Cromarty . . . | .. | 65 | Renfrew . . . | 2 | 225 |
| Dumbarton . . . | 5 | 126 | Ross . . . | 93 | 4,199 |
| Dumfries . . . | 10 | 664 | Selkirk . . . | 3 | 45 |
| Edinburgh . . . | 1 | 1 | Stirling . . . | 8 | 1,581 |
| Elgin . . . | 33 | 6,653 | Sutherland . . | 15 | 1,257 |
| Fife . . . | 15 | 1,195 | Wigtown . . . | 10 | 640 |
| Forfar . . . | 16 | 2,240 | Zetland . . . | .. | .. |
| Haddington . . . | 2 | 15 | | | |
| Inverness . . . | 37 | 2,390 | Totals . . . | 728 | 52,807 |
| Kincardine . . . | 45 | 5,543 | | | |

The *herring fishery* in Scotland and the Isle of Man during the year 1863 was less than in any of the three years immediately preceding, but considerably exceeded the fishery of 1859. The quantity cured was 654,816 barrels; branded, 276,880 barrels; exported, 407,761 barrels; showing, as compared with the year 1862 (the most productive on record), a decrease of 176,087 barrels cured, of 69,831 barrels branded, and of 87,148 barrels exported. The following table shows that although the quantity cured was less, the quantities branded and exported were greater in 1863 than in 1860 and 1861:

| | Barrels cured | Barrels branded | Barrels exported |
|-----------------|---------------|-----------------|------------------|
| Year 1860 . . . | 681,193 | 231,913 | 377,970 |
| " 1861 . . . | 668,828 | 265,347 | 390,818 |
| " 1863 . . . | 654,816 | 276,880 | 407,761 |

The fee for branding, imposed by the act 21 and 22 Vict. c. 69, yielded 2,644*l.* in 1859, 3,865*l.* in 1860, 4,422*l.* in 1861, 5,801*l.* in 1862, 4,618*l.* in 1863; in all, 21,349*l.* The commissioners regard these figures as showing that the imposition of a fee has in no way diminished the desire and applications for the brand, and that the brand remains, as it always has been, the standard of quality for the continental trade. 'It was anticipated,' they remark, 'that the experiment of fishing for herrings upon the ocean coasts in winter (which had been tried for the first time off the Caithness coast in 1862) would be repeated and extended; and this was proved to be the case. The news that herrings were about the coast in winter, and that it was possible to fish for them successfully, soon reached other places, where the adventure was entered upon with more or less enterprise, and gradually trials were made for herrings at that season of the year all along the S. shores of the Moray Frith, and along the E. coast as far S. as Montrose. In some quarters this fishery was so extensively prosecuted as to lead to the fish being selected and branded for the continental market; a circumstance never before known, and so peculiar in its character as to give rise to the question, whether a separate brand ought not to be instituted for winter-caught herrings, in order to distinguish them from those caught in summer? . . . In connection with this subject, as indicative of greater fishing enterprise, it is satisfactory to be able to state that the fishermen's boats and nets are improving in the most marked manner upon almost all parts of the coast; better material and better workmanship are applied to them; the boats

is taken of them in every way, whether as regards building, maintenance, or repair. The fishermen are decidedly becoming more thrifty, and better conducted. Their dwelling-houses and villages, as well as their boats and fishing materials, exhibit the progress which they have made; and although both houses and villages are still susceptible of much and most necessary improvement, yet they unmistakably indicate that this industrious and adventurous race of men, so generally regarded as primitive in their habits and their calling, are in common with the other working classes, being brought under the influence of an advancing civilisation, and are sharing in the better state of things which it produces.

The number of cod, ling, and hake taken or purchased at the cod and ling fishery in Scotland and the Isle of Man, in the year 1863, was 3,791,261, showing, as compared with the year 1862, an increase of 739,407. There were cured dried, 129,725 cwts.; cured in pickle, 7,337 barrels; exported cured dried, 53,786 cwts.; showing, as compared with the year 1862, an increase of 29,068 cwts. in the quantity cured dried, a decrease of 398 barrels in the quantity cured in pickle, and an increase of 20,766 cwts. in the quantity exported cured dried.

The following table shows the number of boats, decked and undecked, employed in the shore-curing herring and cod and ling fisheries, in the several districts of Scotland and the Isle of Man, in the year 1863; the number of fishermen and boys by whom they were manned; and the estimated value of the boats, nets, and lines.

| Districts | Number of Boats | Number of Fishermen and Boys | Value of Boats | Total Value of Boats, Nets, and Lines |
|--------------------------------|-----------------|------------------------------|----------------|---------------------------------------|
| | | | £ | £ |
| Leith | 526 | 1,248 | 17,274 | 44,014 |
| Eyemouth | 699 | 1,833 | 26,464 | 60,758 |
| Greenock | 188 | 425 | 3,382 | 8,683 |
| Ballantrae | 308 | 684 | 2,538 | 6,244 |
| Glasgow | 21 | 39 | 225 | 495 |
| Rothsay | 296 | 794 | 6,299 | 15,428 |
| Inverary | 1,046 | 2,446 | 9,994 | 26,747 |
| Campbelton | 370 | 1,112 | 7,772 | 19,170 |
| Loch Carron and Skye | 630 | 1,890 | 3,890 | 20,183 |
| Loch Broom | 688 | 2,713 | 8,845 | 30,285 |
| Stornoway | 770 | 3,065 | 14,230 | 35,686 |
| Shetland Isles | 672 | 3,136 | 6,280 | 17,136 |
| Orkney Isles | 656 | 2,399 | 10,014 | 21,534 |
| Wick | 1,088 | 4,488 | 40,867 | 102,680 |
| Lybster | 334 | 1,474 | 9,868 | 23,430 |
| Helmsdale | 227 | 897 | 5,364 | 15,940 |
| Cromarty | 309 | 902 | 5,662 | 15,785 |
| Findhorn | 421 | 1,426 | 10,410 | 35,000 |
| Buckie | 677 | 2,540 | 27,103 | 68,695 |
| Banff | 327 | 920 | 6,976 | 22,766 |
| Fraserburgh | 532 | 1,288 | 11,367 | 32,275 |
| Peterhead | 363 | 753 | 11,656 | 27,567 |
| Montrose | 760 | 1,521 | 13,224 | 33,029 |
| Anstruther | 727 | 2,845 | 29,277 | 97,725 |
| Totals for Scotland | 12,575 | 40,838 | 288,981 | 781,255 |
| Do. Isle of Man | 616 | 2,520 | 52,432 | 64,469 |
| Agg. Totals 1863 | 13,191 | 43,358 | 321,413 | 845,724 |
| " 1862 | 13,144 | 43,508 | 304,856 | 811,355 |
| " 1861 | 12,961 | 42,751 | 296,224 | 783,037 |
| " 1860 | 12,721 | 42,430 | 288,517 | 750,196 |
| " 1859 | 12,802 | 43,062 | 280,707 | 739,096 |
| " 1858 | 12,516 | 43,072 | 274,990 | 725,556 |
| " 1857 | 12,377 | 43,014 | 265,569 | 702,715 |

Besides 46,193 fishermen, curers, and coopers employed in 1863, it is estimated that 44,594 other persons were employed in the fisheries in the same

The number of barrels of herrings cured in the several districts, during the year 1863, was as follows: Leith, 3,228; Eyemouth, 36,943; Greenock, 2,881; Ballantrae, 1,341; Glasgow, 8,236; Rothsay, 4,911; Inverary, 19,439; Campbelton, 2,179; Loch Carron and Skye, 962; Loch Broom, 1,160; Stornoway, 47,095; Shetland Isles, 9,733; Orkney Isles, 26,188; Wick, 119,191; Lybster, 30,115; Helmsdale, 43,080; Cromarty, 15,173; Findhorn, 43,360; Buckie, 33,291; Banff, 20,639; Fraserburgh, 44,585; Peterhead, 47,977; Montrose, 24,595; Anstruther, 23,006; Isle of Man, 45,501.

The number of cod, ling, or hake taken or purchased, whether by vessels or by boats, in the several districts, in the year 1863, was as follows: Eyemouth, 8,222; Greenock, 1,605; Ballantrae, 18,254; Inverary, 33,802; Campbelton, 47,488; Loch Carron and Skye, 43,943; Loch Broom, 6,091; Stornoway, 372,318; Shetl. Isles, 1,898,974; Orkney Isles, 417,527; Wick, 40,298; Lybster, 81,625; Helmsdale, 46,968; Cromarty, 7,865; Findhorn, 50,153; Buckie, 264,103; Banff, 58,754; Fraserburgh, 208,415; Peterhead, 41,371; Montrose, 81,333; Anstruther, 69,152; Isle of Man, 3,000.

Scotland formerly engaged largely in the whale fishery, but in recent years this department of industry has declined, not from any diminution of skill or enterprise, but from the increasing risks and unprofitable nature of the business. Fortunately, the loss of the whale fishery has been more than compensated by the extension of the herring fishery, and by the success that has attended it.

Races of Inhabitants.—It is generally allowed that the first immigrants into Scotland, like those into England, whence, perhaps, they originally came, belonged to the great Celtic family; and Mr. Chalmers and others have endeavoured to prove that the population continued to be purely Celtic till it was alloyed, first by Romans, and subsequently by Gothic invaders. (Caledonia, vol. i. p. 496, &c.) But this opinion does not seem very tenable. Tacitus expressly affirms that the Caledonians, or inhabitants of Scotland, were of Germanic or Gothic origin. '*Rutile Caledoniam habitantium comæ, magni artus, Germanicam originem adseverant.*' (Vit. Agricola, cap. xi.) Agricola, however, from whom Tacitus derived his information, knew little or next to nothing of the country N. of the Grampians; and, as there is every reason to think that Berwickshire, the Lothians, Fife, and other parts of the low country on the E. coast of Scotland, were, like the same tracts in England, early occupied by Belgic or other Gothic colonists from the opposite continental coast, it seems most probable that Tacitus, in ascribing to the Caledonians a Germanic origin, had these only in view. The fair presumption is, that, in the northern, as in the more southern part of the island, the old Celtic inhabitants maintained their ascendancy in all the mountainous, and comparatively inaccessible, districts; and this reasonable presumption is corroborated by various circumstances.

In the third century, the terms Picts and Pictland began to be substituted for Caledonians and Caledonia. It is pretty generally believed that these terms apply to the same people and the same country. It seems, indeed, to be perfectly clear, that the Picts were descended from the Scythians or Goths; and, if we be right in our statements, as to the origin of the Caledonians, it follows that, if the Picts were not identical with them, they belonged, at all events, to a congenious race.

(the *Dalriads* of the venerable Bede), began to be distinguished as a leading tribe in Ireland; and seems, indeed, to have given its name to the island, which, for some centuries, was called *Scotia*. (Pinkerton's Geography, i. 137, ed. 1811.) It would seem that, previously to the 11th century, a colony of the Scoti from Ireland had established themselves in the West Highlands; and this colony, in no very long time, gave its name first to the Highlands, whence it was subsequently extended, on its being united under one government, to all that part of the island N. of the Tweed and the Solway Frith. The Scoti ceased to be heard of in Ireland not long after they had obtained a footing in the Highlands, and the ancient names of that island were revived.

Every thing connected with the history of the Scoti is involved in impenetrable obscurity. But it is agreed, that whatever may have been their remote origin, they had, when they settled in the Western Highlands, the language and habits of the Irish Celts, or Gael, a congenerous race with the Highland Celts, and speaking, in fact, the same language. But the Scoti-colonists had a written language, which the old occupiers of the country had not; and they were also decidedly superior to the latter in knowledge and civilisation. (Pinkerton, On the Early History of Scotland, ii. 160.) These circumstances sufficiently account for the ascendancy they acquired, and for their being able to give their name to the Highlands, without having recourse to the hypothesis, for which there is not a tittle of evidence, of their having conquered the country.

After the Romans withdrew from Britain, some Gothic or Saxons tribes, following the example set by those who had previously settled in the more southerly parts of the island, established themselves, during the sixth century of our era, between the Tweed and the Frith of Forth. (Turner's Anglo-Saxons, 5th ed. i. 299.) These new immigrants were afterwards followed by others, at the same time that they drew recruits from their brethren established in England; and Mr. Chalmers supposes that, their power being thus progressively augmented, they gradually acquired a complete ascendancy in all the southern parts of the kingdom, and communicated to it their language and manners. (Caledonia, ii. 7.) This, however, would have been an extremely difficult task; but if, which seems abundantly certain, we conclude with Pinkerton, that the Picts, who were in possession of all the low country in the sixth century, were congenerous with the Saxons, by whom it was then invaded, the two races would readily amalgamate, and the early prevalence of the Scandinavian or Gothic tongue in the Lowlands is rationally and satisfactorily accounted for.

Towards the end of the eighth century, a fresh colony from Ireland established itself in the district now known by the name of Galloway, in the SW. part of Scotland. But though these colonists succeeded in giving a name to the country, they were not sufficiently numerous to introduce their language into common use. And for several centuries, long indeed before the inhabitants had any considerable intercourse with other parts of the kingdom, the Saxon tongue was in as universal use in Galloway as in any part of the Lowlands of Scotland.

Exclusive of the Celts, Goths, or Picts, Romans, Scoto-Irish, and Saxons, colonies of Danes and Norwegians established themselves in Caithness, and other parts of the mainland, as well as in Orkney and Shetland, and parts of the Western Isles. Generally however, it may be said, not-

withstanding the late great influx of Irish settlers into Glasgow, Paisley, and other large towns, that at present the inhabs. of the Lowlands of Scotland are principally of Saxon, while those of the Highlands, with the exception of Caithness, are almost entirely of Celtic extraction.

Population.—There are few data for estimating the amount of the pop. previously to the period of the Union, in 1707, at which time Scotland is supposed to have had about 1,050,000 inhabs. In 1755, the pop. was ascertained by Dr. Webster to amount to 1,265,000; and at the census of 1801 it was proved to be 1,608,420. It was 1,805,864 in 1811; 2,091,521 in 1821; 2,364,386 in 1831; and 2,620, in 1841. The increase, from 1801 to 1841, was less than the increase of the pop. of England during the same period; and also, much less than the increase in Ireland from 1801 to 1831. This, however, was rather a favourable symptom, for there are good grounds for thinking that the wealth of Scotland increased more rapidly during the above period than that of either of the other great divisions of the empire; and inasmuch as her inhab. did not increase so fast, their condition must have been proportionally improved. The division of the population into five classes, after the same method as that adopted in England and Wales, presents the following result:—

| | 1851 | 1861 |
|-------------------------|-----------|-----------|
| 1. Professional Class . | 42,001 | 52,515 |
| 2. Domestic " . | 1,731,279 | 1,734,295 |
| 3. Commercial " . | 74,756 | 84,838 |
| 4. Agricultural " . | 388,203 | 378,609 |
| 5. Industrial " . | 543,662 | 694,074 |
| 6. Indefinite " . | 108,841 | 118,468 |
| | 2,888,742 | 3,062,294 |

In 1861, therefore, of every 100,000 persons in Scotland, 1,715 belonged to the professional class, 2,754 to the commercial, 12,364 to the agricultural, 22,665 to the industrial, 56,634 are classed only as domestic, and 3,868 are undefined, or ill-defined.

The increase of pop. has been chiefly in the great towns. The pop. in some of the cos. has rather declined lately, in consequence of the consolidation of farms, and the extension of sheep walks.

Agriculture.—Scotland, from being about the middle of the last century one of the worst cultivated countries of Europe, is now one of the best. At this moment, indeed, the agriculture of the best farmed cos. of Scotland is certainly equal, and is by many deemed superior, to that of Northumberland, Lincoln, and Norfolk, the best farmed cos. of England. The proximate cause of this extraordinary progress must be sought for in the rapid growth of manufactures and commerce, and consequently of large towns, and the proportionally great demand for agricultural produce since the peace of Paris in 1763, and especially since the close of the American war. Fortunately, too, the influence of these favourable circumstances was not counteracted by any vicious institutions, or by anything unfavourable in the mode of letting and occupying land. Next to the opening of new, extensive, and rapidly increasing markets, the wonderful improvement of Scotch husbandry may be ascribed to the prevalence of leases of reasonable length, usually 19 years, and which generally embody clauses to prevent the exhaustion of the soil; the absence of tithes, and, in most instances, of poor-rates, and of all oppressive public burdens; the prohibition of sub-letting, and the inheritance of the lease by the heir-at-law; the introduction of sheep-farming into the Highlands, and the great improvement made in the construction of all sorts of farming implements. The general use of thrashing machines, many of which

are impelled by steam, and of ploughs with two horses driven by the ploughman, are distinguishing characteristics of Scotch, as compared with English, agriculture.

Landed property in Scotland, as compared with its extent and value, is in fewer hands than in England, there being probably not more than 8,000 proprietors in the whole country. It is most subdivided in the counties of Fife, Mid-Lothian, Renfrew, and Kirkcudbright, but even in these there are many large estates; and in most other parts of the country the greater portion by far of the land is distributed into very large estates, many of which were held, down to 1848, under a system of strict and perpetual entail; but this system having been found to be productive of various inconveniences, it was superseded in the above-mentioned year by the stat. 11 & 12 Vict. c. 36, which has abolished perpetuities, and placed the Scottish law of entail nearly on the same footing as the English. But the former tenure was not nearly, in its practical influence, so prejudicial to agriculture as might, *a priori*, have been anticipated. This results from the circumstance of the courts of law having decided that it was illegal to let lands belonging to an entailed estate, either for an unusually long period, or by fines (Scottish *grassums*); so that, in truth, there has been little or no difference between the conditions under which entailed and unentailed estates have been occupied; and as the proprietors of the former have been empowered to burden the estates, proportionally to their value, with sums laid out on necessary improvements and buildings, they are, speaking generally, in as good order and as productive as the others.

Farms are of all sizes, varying from 50 to 500 acres and upwards in the improved tillage districts, and from 500 to 5,000 acres and upwards in the hilly and mountainous tracts. Except in a few of the sequestered glens of the Highlands, into which the improved systems have not been introduced, the division of the land is nowhere carried to such an extent as to be prejudicial to agriculture; and, in most parts of the country, farms have been gradually consolidating and increasing in size since the American war. At an average of the kingdom, arable farms may vary from 150 to 300 acres, and pasture farms from 500 to 5,000 acres.

Down to the close of the American war, the farm buildings in most parts of Scotland were mean and inadequate in the extreme. In the Lothians they were commonly ranged in a row, having the dwelling-house in the middle, with a barn at the one end, and cattle-houses at the other. In other parts, they were frequently huddled together without any sort of order. The walls were always low, in most instances of stone and clay, the roof being invariably thatch. The dunghill was universally opposite to the door; and so near it, that in wet weather it was no easy matter to get into the house with dry feet. The change that has taken place in these respects during the last half century has been signal and complete. In none but the least accessible and least improved districts are any of the old houses now to be met with. Perhaps, indeed, the other extreme has not been sufficiently avoided; buildings having, not unfrequently, been erected that seem to be both larger and more expensive than necessary. The offices are mostly constructed in the form of a square. In some instances, the dwelling-house makes one of its sides; but in the better class of farms it is removed to some distance from the offices. It is generally two stories high

The expense of buildings is uniformly defrayed by the landlord; but the tenant, for whose accommodation they are in the first instance erected, sometimes pays a percentage upon the money laid out upon them. Sometimes, also, the tenants undertake to carry the materials used in building.

The fences in many parts of Scotland consist of dry stone walls; which, though destitute of beauty, make, when properly built, a capital fence. This species of inclosure seems to have originated in the SW. Kirkcudbright and Wigton were early subdivided with excellent stone dykes, that are now celebrated all over the kingdom by the name of 'Galloway dykes.' They are of very various heights and degrees of goodness; but the best are built double to a certain height, when they are capped with broad flat stones projecting a little on each side, over which others are usually laid single; but sometimes those laid over the cap-stone are made to lock firmly together. The best dykes vary from 5½ to 8 ft. in height; and when they have been carefully founded, well built, and constructed of good stones, they make a most excellent and a very durable fence. Examples are not rare of their standing for 60 or 70 years without receiving almost any repair. In a few instances they have been found, at above 100 years of age, in a state of perfect preservation. But unless they be of superior material and workmanship, they seldom last more than from 25 to 30 years. Most of the dry stone walls now to be met with all over Scotland have been built, sometimes with more, sometimes with less success, after the Galloway model.

In respect of farming implements, Scotland has very much the advantage over England. The improved Scotch plough is everywhere met with in the agricultural districts, and is uniformly drawn by two horses, driven by the ploughman. Iron harrows are common. Thrashing-machines are introduced far more extensively than in England; and there is hardly, indeed, a considerable farm in any part of the country without one. The Scotch labourers have never been so absurd as to attempt to advance their interests by destroying those valuable engines.

During the last 50 years, and especially since 1840, improvements of all sorts have been prosecuted in Scotland with extraordinary spirit and success. Drainage has been the great object of attention; and, in some extensive districts, it has been carried to such an extent as to have effected a material change in the climate as well as in the soil and appearance of the country, accelerating the period of harvest by two or three weeks! Farms that were formerly wet, late, and suitable only for oats, are now, by the aid of furrow-draining and subsoil-ploughing, made thoroughly dry, early, and suitable for turnips, and for every variety of corn crop. Guano, bones, and other manures are now, also, very largely imported; and these, with the increased quantity and efficacy of farm manure, arising from the improved methods of preserving and applying the latter, have added prodigiously to the productiveness of the land, and to the weight and quality of its produce.

Scotland may be divided into three agricultural districts:—Of these the first, or most southerly, extending from the English border to the rivers Forth and Clyde, contains a large extent of mountainous and pasture land. But extensive tracts in Berwickshire and the Lothians, on the E. coast, are naturally fertile, and are farmed with a degree of skill, economy, and success, unequalled almost in any other part of the empire. There are also

fries; but the climate on the W. coast is not so favourable, and agriculture is not so far advanced on that side the island as on the E. The second agricultural division stretches from the Forth and Clyde to the great chain of lakes connected by the Caledonian Canal, that runs from Inverness to the Island of Mull. The mountains in this division are on a grander scale than in the southern division, and the proportion of waste land much greater. It, however, contains some of the finest land in the empire. The carse of Gowrie, stretching from Perth to Dundee, consists of the richest alluvial soil; but its agriculture, though good, is not equal to that of some other districts. Strathern, lying to the W. of Perth, is also very fertile. Most part of the extensive county of Fife is arable, and is, in general, highly improved. There are also very large tracts of fine land in Forfarshire and Angus, and smaller portions in Aberdeenshire and Moray. The third division of Scotland, or that which embraces the country lying to the N. of the Caledonian Canal and the lakes, is, with the exception of the eastern parts of Ross-shire, and a few patches beside, wild and mountainous. Black cattle, sheep, and wool are its principal products.

Except in the S.E. counties, oats are grown in far greater quantities than any other kind of grain; and, from more attention being paid to their culture, or the greater suitableness of the climate, or both, the produce is greater than in England, varying from 30 up to 75 bushels an acre, and even more. Oatmeal, which, till a late period, formed, in cakes and porridge, the principal part of the food of the great bulk of the people, is still in very extensive demand; but, latterly, the use of wheaten bread has become very general in the rural districts as well as in the towns. Turnips and potatoes are cultivated throughout most part of the Lowlands. The raising of the former is, perhaps, nowhere so well conducted as in E. Lothian and Berwickshire; and their culture in all parts, but especially in the W. cos., has increased with extraordinary rapidity during the last 20 years. Potatoes have of late been grown in large quantities in some of the E. cos. for the London market; and they form, we are sorry to say, an important article of food in most parts of the country; but their cultivation, and the grower's dependence on them, have both been lessened by the recent failures of the crop. The practice of taking two white crops in succession has been almost wholly abandoned in the Lowlands.

Dairy husbandry is mostly pursued in the shires of Ayr and Renfrew, in the former of which Dunlop cheese is made; but it is also introduced into Wigtown and other cos. Cows of the genuine Ayrshire breed are admirable milkers, and the average quantity of butter produced by each has been estimated at upwards of 250 lbs. a year. The Galloway, Fifehire, and Highland breeds are the best for fattening, and yield, especially the first and last, excellent beef. The Galloway cattle are mostly sent up half fed, to be fattened in Norfolk and Suffolk for the London markets; but many of them are now fattened at home, and are sent direct by steam to Liverpool. Three principal breeds of sheep are reared in Scotland: the dun-faced, or Scandinavian breed, said to have been imported into Scotland from Denmark, of which a few are found in the cos. N. of the Frith of Tay; the black-faced, or heath breed, very widely diffused, and very hardy; and the Cheviots, the famous breed native to the Cheviot Hills. The latter are found to thrive in districts

considerable extent, superseded the latter, the carcase and fleece being both much more valuable. More recently an improved cross breed, between the Cheviot ewe and the Leicester ram, has been extensively and advantageously introduced in the hill pastures of the S. cos.

Rent has increased much more rapidly in Scotland than in England. This is ascribable partly to the extremely backward state of Scotch agriculture till after the peace of Paris, in 1763, and partly to the extraordinary advance it has made since the close of the American war. The entire rental of the kingdom is not supposed to have exceeded 1,000,000*l.* or 1,200,000*l.* in 1770. In 1795 it is believed to have rather exceeded 2,000,000*l.*, and since then it has more than trebled. So rapid an increase of rent is probably unmatched in any old settled country, and indicates an astonishing degree of improvement.

The wealth of the farmers, and the comfort and well-being of the agricultural labourers, have increased in quite as great a proportion as the rents of the landlords. Notice has already been taken of the extraordinary improvement that has taken place in farm-houses and offices since the close of the American war, and especially during the present century; and the same improvement is everywhere visible in farming stock and implements; in the furniture and other accommodations of the farm-houses, and in the dress and mode of life of their occupiers. No old settled country, of which there is any authentic account, ever made half the progress in civilisation and the accumulation of wealth, that Scotland has done since 1763, and especially since 1787.

Some very great improvements have, ■ already seen, been introduced into agriculture within the last few years, and are now rapidly spreading over the country. The facilities afforded by steam navigation for the conveyance of fat cattle and sheep to the great markets of London and Liverpool, as well as to those of Edinburgh and Glasgow, have also been of vast importance, and have enabled the remotest districts to come into successful competition with those that are most favourably situated. In consequence, agriculture is at this moment in a rapid state of advancement. And, notwithstanding the lower prices, farms let better now than at any former period, and the fair presumption seems to be that, great as has been the improvement of agriculture during the last half century, it will be equal or greater in the future.

The condition of the agricultural labourer has, as already stated, been vastly improved. With the exception of those districts in the Highlands and Isles, luckily few in number, into which improvements have not yet made their way, the cottages of the peasantry have been mostly rebuilt during the last half century; and though still, in most instances, without the rustic beauty and neatness that so frequently distinguish English cottages, they are far from uncomfortable. In most parts of the country such of the farm-labourers as are married, and have families, receive the greater part of their wages in specific quantities of farm produce, which do not vary with the variations of price, so that, if they be not so well off as the manufacturing workpeople, when trade is brisk and prices low, neither are they exposed to suffer like the others, when there is little demand for labour and prices are high; on the whole, they may, speaking generally, be said to be in decidedly comfortable circumstances. The unmarried servants frequently live in the

their sons not unfrequently emerge from obscurity, and attain to distinction.

Manufactures.—For a lengthened period after the union with England, Scotland made little or no progress in manufactures; and it was not till after the peace of Paris, in 1763, that the public enterprise began to be turned into this great channel, and that a rapid extension took place of most sorts of industry. A considerable depression ensued towards the close, and after the termination of the American war. But it was not of any very lengthened duration; and the foundations of the cotton trade having been laid about this period, manufactures have continued, from 1787 down to the present time, progressively to gain ground in Scotland, and have been prosecuted with equal skill, industry, and success.

The cotton manufacture, which principally centres in Lanark and Renfrew shires, is of comparatively recent introduction, the first steam-engine for a cotton factory having been constructed so late as 1792. But the woollen manufacture has been of long standing, and was formerly much more widely diffused than at present, having been, in fact, with that of linen, a domestic manufacture, and pursued in every cottage. It was the universal practice of the peasantry, and occupiers of land, to spin, at home, the greater part of their own wool, as a subsidiary employment, and to send the yarn to be made into coarse cloth to the nearest village.

There is still a class in Scotland called *customer weavers*, scattered over the country, but now principally confined to the Highlands, employed by private families to weave yarn into coarse fabrics for domestic use. Most part of these are also agricultural labourers, weaving only in the intervals of their ordinary avocations; they earn from 1s. 6d. to 2s. 6d. a day, but few higher than 2s. But except these, and persons living at watering-places, and on parts of the E. coast, where they engage in fishing or boat-letting for a part of the year, the great bulk of the weavers of Scotland subsist entirely by the loom, and engage in no other pursuits. For some time past this class has been in very depressed circumstances. Owing to the facility with which the business of weaving may be learned, and the sort of independence it confers on the weaver, it has always been a favourite employment; and, consequently, except in periods of great prosperity, the wages of weavers have generally been rather low. Of late years, however, the introduction of power-looms has gone far to supersede, to a great extent, the business of the regular hand-loom weaver, especially of those engaged in the manufacture of cottons; and the fair presumption seems to be, that in no very lengthened period the business of the hand-loom weavers will be all but totally annihilated. But though there can be no doubt that, in a public point of view, this change will be productive of great advantage, it involves, in the meantime, the class of hand-loom weavers in the greatest difficulties; and much of the ordinary manufacturing distress proceeds from hand-loom weavers thrown out of employment by the competition of power-looms, or forced to labour for the merest pittance.

Compared with the woollen manufacture of England, that of Scotland is inconsiderable. Flannels, blankets, shawls, plaids, stockings and stocking yarn, tartans, carpets, and druggets are produced to a considerable extent at Galashiels, Paisley, Hawick, Jedburgh, and Aberdeen. Some of the finer descriptions of cloth are made at Aberdeen and in its vicinity, and some of its woollen mills and factories are on a large scale. Kilmarnock is

manufacture. The power-loom having hitherto been but little adopted in the woollen manufacture, the weavers employed in this department get good wages, are well clothed and lodged, and in all respects exhibit a marked contrast with the hand-loom weavers engaged in the cotton manufacture.

The linen manufacture of Scotland is of very considerable value and importance: Dundee is its chief seat, and the statements given under that head (see DUNDEE), show that its increase since 1811 has been quite extraordinary. Osnaburgs, sheeting, cotton bagging, sail-cloth, dowlas, and other coarse goods, are the articles principally made in Dundee and in Kirkcaldy, Arbroath, Forfar, Montrose, Aberdeen, and other seats of the manufacture in the E. of Scotland. The finer descriptions of linen fabrics, as damasks, diapers, and skirting, are principally produced in Dunfermline and its immediate vicinity. The linen weavers occupy an intermediate position between the woollen weavers on the one hand and the cotton on the other. The silk manufacture is of little importance. The printing of shawls is extensively carried on at Paisley.

The iron-works at Carron, near Falkirk, established in 1760, were for a lengthened period the most extensive in the kingdom; but they are now far surpassed by those of Gartsherrie, Dundym, Monkland, and Omoa, in Scotland, and by many in England. A good deal of Scotch ironmongery, comprising anchors, bolts, axles, mill and engine-work, is exported to the colonies and foreign countries. The manufacture of machinery is an important branch of industry. Coaches are made in all large towns. The building of ships is extensively carried on in Aberdeen, Dundee, and other ports, but especially in the Clyde. Iron steam and sailing ships are built there more extensively, and, it is also said, with better success than anywhere else in the U. Kingdom. Glass wares, chemical products, soap, candles, and starch are among the other principal manufactured goods.

The favourite beverage of the people of Scotland has, for a lengthened period, been whisky, a spirit generally distilled from malt or raw grain. Owing to the excess of the duties with which this spirit has occasionally been charged, its smuggling has sometimes been carried to a great extent; but in recent years, when the duties were greatly reduced, it has been comparatively rare.

Commerce.—Having little industry, and being thinly peopled, Scotland had formerly a very limited foreign trade. The exports consisted of wool, skins, hides, and other raw materials, exchanged for corn, wine, and spices. Even so late as the era of Cromwell her mercantile marine comprised only 93 vessels, of the aggregate burden of 2,724 tons, and 18 barks. During the reign of Charles II. the trade of the country, especially that with Holland and the countries round the Baltic, began to increase. It was not, however, till after the completion of the Union, in 1707, when the trade to the American and W. Indian colonies was, for the first time, opened to the enterprise and activity of the Scotch, that the commercial energies of the nation began to be awakened. But for a while the merchants of Glasgow, who first embarked in the trade to America, carried it on by means of vessels belonging to English ports; and it was not till 1718 that a ship built in Scotland (in the Clyde), the property of Scotch owners, sailed for the American colonies. The establishment and rapid extension of manufactures in Scotland, since 1763, has necessarily occasioned a corresponding increase of commerce,

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MAP OF THE
RAILWAYS
OF
SCOTLAND.

English Miles
0 10 20 30 40 50

The number of sailing-vessels of and under 50 tons, registered in Scotland, on the 31st day of December, 1863, was 1,108, their tonnage, 33,881; above 50 tons, 1,972, their tonnage 552,890. The number of steam-vessels, of and under 50 tons, was 102, their tonnage, 2,608; above 50 tons, 262, their tonnage, 92,188.

The sailing-vessels registered at Aberdeen were 251, their tonnage, 77,440; at Alloa, 44, their tonnage, 10,281; at Arbroath, 84, their tonnage, 11,642; at Ardrossan, 81, their tonnage, 11,343; at Ayr, 49, their tonnage, 6,672; at Banff, 115, their tonnage, 12,891; at Borrowstounness, 59, their tonnage, 6,672; at Campbeltown, 40, their tonnage, 1,658; at Dumfries, 117, their tonnage, 14,343; at Dundee, 205, their tonnage, 42,873; at Glasgow, 540, their tonnage, 197,793; at Grangemouth, 39, their tonnage, 5,427; at Greenock, 375, their tonnage, 88,809; at Inverness, 239, their tonnage, 11,521; at Irvine, 37, their tonnage, 6,425; at Kirkcaldy, 58, their tonnage, 5,546; at Kirkwall, 48, their tonnage, 2,768; at Leith, 186, their tonnage, 23,614; at Lerwick, 75, their tonnage, 2,766; at Montrose, 110, their tonnage, 16,359; at Perth, 57, their tonnage, 5,065; at Peterhead, 69, their tonnage, 10,572; at Port-Glasgow, 40, their tonnage, 2,857; at Stornoway, 43, their tonnage, 1,940; at Stranraer, 46, their tonnage, 2,467; at Troon, 7, their tonnage, 915; at Wick, 63, their tonnage, 3,934; at Wigtown, 53, their tonnage, 2,776.

The steam-vessels registered at Aberdeen were 16, their tonnage, 3,373; at Alloa, 5, their tonnage, 231; at Ardrossan, 2, their tonnage, 105; at Ayr, 2, their tonnage, 214; at Borrowstounness, 2, their tonnage, 285; at Campbeltown, 2, their tonnage, 279; at Dundee, 17, their tonnage, 3,538; at Glasgow, 201, their tonnage, 65,787; at Grangemouth, 8, their tonnage, 1,318; at Greenock, 27, their tonnage, 1962; at Inverness, 1, its tonnage, 20; at Irvine, 1, its tonnage, 15; at Kirkcaldy, 2, their tonnage, 121; at Kirkwall, 1, its tonnage, 26; at Leith, 63, their tonnage, 15,984; at Montrose, 2, their tonnage, 40; at Perth, 1, its tonnage, 51; at Port-Glasgow, 8, their tonnage, 889; at Stranraer, 1, its tonnage, 229; at Wick, 1, its tonnage, 95; at Wigtown, 1, its tonnage, 284.

The number of sailing-vessels entered coastwise in Scotland, in 1863, was 14,184 (14,153 British, 31 foreign); their tonnage, 935,838 (933,559 British, 2,279 foreign); the number cleared coastwise was 14,479 (15,451 British, 28 foreign); their tonnage, 999,713 (996,333 British, 3,380 foreign). The number of steam-vessels entered coastwise was 6,618 (all British); their tonnage, 1,476,358; the number cleared coastwise, 6,526 (all British), their tonnage, 1,463,017.

The number of sailing-vessels entered inwards from the colonies in Scotland, in 1863, was 561 (523 British, 38 foreign); their tonnage, 357,078 (238,571 British, 18,507 foreign); the number cleared outwards for the colonies was 702 (656 British, 46 foreign); their tonnage, 335,222 (312,042 British, 23,180 foreign). The number of steam-vessels entered inwards from the colonies was 18 (all British); their tonnage, 18,419; the number cleared outwards for the colonies was 67 (66 British, 1 foreign); their tonnage, 31,552 (31,286 British, 266 foreign).

The number of sailing-vessels entered inwards from foreign ports in Scotland, in 1863, was 4,769 (1,648 British, 3,121 foreign); their tonnage, 697,058 (290,998 British, 406,060 foreign); the number that cleared outwards for foreign ports was 5,209 (2,052 British, 3,157 foreign); their tonnage, 737,306 (329,703 British, 407,603 foreign). The number of steam-vessels entered inwards from

foreign ports was 401 (349 British, 52 foreign); their tonnage, 143,422 (127,521 British, 15,901 foreign); the number cleared outwards was 527 (472 British, 55 foreign); their tonnage, 189,539 (167,742 British, 21,797 foreign).

Currency.—The currency of Scotland has, for a lengthened period, principally consisted of the notes of the different banking companies. These, for the most part, are joint-stock associations with numerous bodies of partners, and have been managed with great skill and discretion. Very few bankruptcies have occurred among the Scotch banks; and they have contributed materially to forward the improvement of the country by the facilities they have afforded to industrious and deserving individuals of obtaining loans; and still more by the practice, which has long been acted upon, of taking very small sums in deposit, and allowing interest upon them at about 1 per cent. below the market rate at the time. This has brought, as it were, a number of substantial and well-organised savings' banks within reach of all classes; and by furnishing every facility for the safe and profitable custody of the smallest and largest sums, has powerfully stimulated the desire to save and amass. The subjoined table shows the amount of bank-notes authorised by law to be issued by the several banks of issue in Scotland, and the average amount of bank-notes in circulation during thirteen periods of four weeks from Dec. 3, 1862, to Nov. 14, 1863, and from Dec. 12, 1863, to November 12, 1864, as published in the 'Gazette':—

| Names of Banks | Authorised Circulation | Average Circulation 1862-3 | Average Circulation 1863-4 |
|-------------------------------|------------------------|----------------------------|----------------------------|
| | £ | £ | £ |
| Bank of Scotland | 300,485 | 460,702 | 472,148 |
| Royal Bank | 183,000 | 467,984 | 502,974 |
| British Linen Co. | 438,024 | 489,722 | 491,703 |
| Commercial Bank of Scotland | 374,880 | 524,679 | 537,840 |
| National Bank of Scotland | 297,024 | 465,672 | 454,875 |
| Union Bank of Scotland | 454,346 | 584,238 | 592,519 |
| Aberdeen Town & County Bank | 70,133 | 135,487 | 135,440 |
| North of Scotland Banking Co. | 154,319 | 208,695 | 205,273 |
| Dundee Banking Co. | 33,451 | 45,855 | 40,259 |
| Eastern Bank of Scotland | 33,636 | 43,539 | .. |
| Clydesdale Banking Company | 240,685 | 347,714 | 368,850 |
| City of Glasgow Bank | 72,921 | 328,387 | 357,581 |
| Caledonian Banking Company | 53,434 | 75,991 | 72,169 |
| Central Bank of Scotland | 42,933 | 57,536 | 59,450 |
| Total | 2,749,271 | 4,236,101 | 4,296,687 |

Roads.—With the exception of the military roads, constructed in the Highlands after the suppression of the rebellion in 1745, the roads of Scotland were, speaking generally, in the most execrable state down to the American war. But such and so great has been the improvement in the interval, that they are now quite equal to the best roads in England, and are not, indeed, surpassed by any in Europe. They are laid down on the most approved principles; and, notwithstanding the rugged nature of the country, it is but seldom that horses in a carriage may not be driven along at a smart trot. The facility with which excellent materials for their construction may almost everywhere be obtained has materially contributed to forward their formation. The roads

within what is called the Highland district have been partly constructed by means of advances from government, and the public money has very rarely been so profitably expended.

Railways.—Scotland is intersected with railways to an extent which, considering the rugged nature of the country, could hardly have been anticipated. There are three main lines of railway from England to Scotland, viz. the E. line, by Newcastle, Berwick, and Dunbar; the central or Caledonian line, by Carlisle, Ecclefechan, and Lanark; and the W. line, by Carlisle, Dumfries, Sanquhar, and Kilmarnock. Edinburgh, Glasgow, and all the principal towns of Scotland are united by railway. The facilities of intercourse that have thus been afforded are quite extraordinary. The following table gives a list of the railways of Scotland on the 1st of January, 1864, with a summary of the length of lines in the five preceding years:—

| Railways | Miles of Railway open for Traffic | | |
|--|-----------------------------------|--------|--------|
| | Double | Single | Total |
| Caledonian | 190 | 80 | 270 |
| Crieff Junction | .. | 9 | 9 |
| Deeside | .. | 32 | 32 |
| Edinburgh and Glasgow | 115 | 31 | 146 |
| Forth and Clyde Junction | .. | 30 | 30 |
| Forth and Clyde Navigation | .. | 1 | 1 |
| General Terminus and Glasgow Harbour | 0½ | .. | 0½ |
| Glasgow and South-Western | 168 | 67 | 235 |
| Great North of Scotland | 5 | 221 | 226 |
| Inverness & Aberdeen Junction | .. | 207 | 207 |
| Leven and East of Fife | .. | 19 | 19 |
| Monkland | 13 | 59 | 72 |
| North British | 225 | 232 | 457 |
| Port Patrick | .. | 62 | 62 |
| Scottish Central | 70 | 34 | 104 |
| Scottish North-Eastern | 115 | 28 | 143 |
| Totals Year 1863 | 901½ | 1,112 | 2,013½ |
| " " 1862 | 885½ | 892 | 1,777½ |
| " " 1861 | 868 | 782 | 1,650 |
| " " 1860 | 854½ | 631½ | 1,486 |
| " " 1859 | .. | .. | 1,428 |

Canals.—Of the Scotch canals, the most important is that called the Great Canal, uniting the Friths of Forth and Clyde, and, consequently, forming an easy water communication between the E. and W. coasts of the island. Including its branch to port Dundas, in the vicinity of Glasgow, it is about 38 m. in length; the medium width at the surface is 56 ft., and at the bottom 27 ft.; average depth from 9 ft. to 10 ft.; summit level, 156 ft. above the sea; it has 39 locks. This important work was begun in 1768, but was not finally completed till 1790. It has been as profitable to the shareholders as it is advantageous to the public. The Union canal joins the Forth and Clyde canal, near Falkirk, and stretches thence to Edinburgh, being about 31½ m. in length. It was completed in 1822, but has been, in all respects, a most unprofitable undertaking. It has latterly been sold at a heavy loss to the Edinburgh and Glasgow railway company, who employ it in the conveyance of coal and other heavy articles.

There are other canals in the vicinity of Glasgow; the Crinan canal stretches across the Mull of Cantire, and there is also a canal in Aberdeenshire. But the greatest work of this class in Scotland is the Caledonian canal. It stretches quite across the island, through the centre of the Highlands, N.E. and S.W., from the Beaully Frith on the E. coast to Loch Linnahe on the W. It is chiefly formed by the chain of lakes, including

occupy the bottom of the remarkable glen or depression through which it is carried. Its total length, including the lakes, is 58½ m.; but the artificial or excavated part is only 21½ m. At the summit it is only 96½ ft. above the level of the W. Ocean. It is mostly constructed upon a very grand scale, being intended to be 20 ft. deep, 50 ft. wide at bottom, and 122 ft. at top; the locks are 20 ft. deep, 172 in length, and 40 in breadth; and had it been wholly executed as was originally intended, frigates of 32 guns, and merchant ships of 1,000 tons burden, might have passed through it. It was opened in 1822, being executed entirely at the expense of government, from the designs and under the superintendence of Thomas Telford, esq. The entire cost exceeded a million sterling. The amount of tonnage rates received from vessels navigating the Caledonian canal was 5,036*l.* in the year ended 1st May, 1863, and 5,088*l.* in the year ended 1st May, 1864; showing an increase during the latter period of 47*l.* The number of passages made on the canal in the year ended 1st May, 1864, was 1,676, of which 538 were through passages from east to west, 340 were through passages west to east, 829 were passages on parts of the canal, and 469 were passages by steamers. The number of passages in the year ended 1st May, 1863, was 1,884, of which 566 were through passages from east to west, 398 were through passages from west to east, 415 were passages on parts of the canal, and 505 were passages by steamers.

Constitution.—The constitution of Scotland has been, from the earliest times, what is called a limited monarchy. Originally the parliament, or great council of the nation, consisted of the king, the barons, and the principal ecclesiastics. Burgesses, or representatives for the town, were admitted into the Scotch parliament by Robert Bruce, in 1326; and in 1427 the lesser barons or freeholders in the different counties were authorised to send representatives; but so little was this privilege valued, that it was hardly exercised for 160 years, or till the reign of James VI., when the freeholders were compelled to send representatives.

Scotland, however, derived little or no benefit from her parliament. The nobility, or greater barons, and clergy sat and voted in the same chamber with the representatives of the lesser barons and of the towns; so that, even if the latter had been more powerful and independent than they were, they could have made no effectual opposition to any measure patronised by the nobles and clergy. In point of fact, however, the representatives of the counties were mere nominees of the great lords; and the towns having neither wealth, population, nor importance, their representatives were necessarily as impotent as themselves. The nobility and clergy were, in truth, for a lengthened period everything, and the people nothing.

Even had it been, in other respects, better constituted, the institution of the lords of the articles would have rendered the parliament of Scotland good for nothing as a check on the sovereign. This was a committee, consisting of a few members, chosen either directly or indirectly by the crown, to which all matters to be brought before parliament had, in the first instance, to be referred; and which had power to reject such as it disapproved of, and to modify and alter the others in any way it thought proper. The committee had, therefore, a negative before debate; and the whole duty of parliament was confined to meeting for a day or two at the end of the session, to confirm the proceedings of the lords of the articles.

possessed by the sovereigns in the Scotch parliaments; and had their ability to carry laws into effect been, in any respect, equal to the facility with which they could get them passed, the kings of Scotland would have been the most, instead of the least, powerful of European princes. The committee of the lords of the articles was suppressed at the Revolution. But owing to the defects in the mode of choosing representatives, the constitution of parliament was but little improved by its suppression; and down to the passing of the Reform Act, in 1832, Scotland had the shadow merely, without the substance, of a representative government.

According to the articles of union in 1707, the peerage of Scotland is represented in the House of Lords of the United Kingdom by 16 peers, chosen by the whole body of Scotch peers at the commencement of each parliament. It was then also arranged that the cos. of Scotland should be represented in the H. of C. by 30, and the bors. by 15 mems. This arrangement was continued till 1832, when the borough representation received an addition of 8 mems., the mems. for the cos. continuing as before.

Courts of Law.—The court of session, which was constituted by an act of the Scottish parliament in 1537, is the highest civil court of Scotland, having jurisdiction in all civil questions of whatever nature. It was intended to supply the place of the previously existing courts, and more especially of a judicial committee of parliament called the 'lords of session,' whence the name of the court and the titles of the judges. Originally it consisted of seven laymen and eight churchmen, including the president. In 1640, however, an act was passed, providing for the exclusion of churchmen from the court; and, though repealed in 1661, the principle laid down in it has ever since been acted upon. Other important improvements were introduced at different periods, particularly after the revolution, when the right of appeal from the court to parliament was, for the first time recognised. At the union, power was given to all individuals who considered themselves aggrieved by judgments of the court of session to appeal to the H. of Lords; and, for a lengthened period, the principal judicial business of the H. of Lords consisted in hearing and deciding Scotch appeals. Originally, and down to 1808, the whole fifteen judges sat together in one court; but in that year an act was passed dividing the court into two chambers, the lord president presiding in the first division of seven judges, and the lord justice-clerk in the second, of six; the two remaining judges trying cases in the first instance, or, as it is technically termed, sitting as lords-ordinary. Since then the number of judges has been reduced to thirteen; four belonging to each of the divisions, and five acting as lords-ordinary, or sitting as single judges. The judges were at first chosen by the Scotch parliament; but since 1554 they have been appointed by the crown. They are indifferently styled lords of session, or senators of the college of justice, which last embraces the whole body of barristers (advocates), and attorneys or solicitors who practise before the court. They must be twenty-five years of age; and, by the treaty of union, no person can be named to the office unless he have served as an advocate or principal clerk of session for five years, or as a writer to the signet for ten. The salaries of the ordinary judges have been raised to 3,000*l.* a year each; those of the lord justice-clerk and lord president being, respectively, 4,000*l.* and 4,500*l.*

At its outset the court of session was intended to serve as a standing or perpetual jury for the

trial of cases; the introduction of petty juries into the trial of civil cases in Scotland being only of very recent date, as well as of limited application. It was, in fact, unknown till 1815, when a special or jury court was instituted, for the trial of cases involving questions as to the value of property, the amount of damages, or the determination of some fact. But in 1830 this court was suppressed; and the court of session now avails itself of the assistance of petty juries.

The high court of justiciary was remodelled, and placed nearly on its present footing, in 1672. It consists of five judges of the court of session, specially commissioned by the sovereign, together with the justice-general and justice-clerk; the former, or, in his absence, the latter, being president. In 1836, the office of lord justice-general was conjoined with that of lord president of the court of session. The jurisdiction of this court extends to all criminal cases, except those of high treason, which are tried by a special commission, in the English form, on the finding of a *grand jury*, which is not used in other cases in Scotland. The judgments of the court of justiciary are final, no appeal lying from them to the H. of Lords. Circuit or assize courts are held twice a year, by the judges of this court, in the principal towns of Scotland, two judges usually going on each circuit; and an additional circuit-court is held at Glasgow during the Christmas holidays. The circuit-courts have power to decide in appeals from inferior courts, where the subject in dispute does not exceed 25*l.* Cases brought before the justiciary courts are tried by petty juries of 15 persons, who decide by a plurality of votes, not being compelled, as in England, to give unanimous verdicts. It is not going too far to say, that, down to a very recent period, this was, in as far as respects political cases, one of the most corrupt and worthless tribunals in Europe. Owing to the mode in which juries were selected, it was always in the power of the lord advocate, or public prosecutor, to get a jury appointed favourable to his own views; and the judges, having been appointed by the crown, and looking to it, most probably, for farther advancement for themselves or their families, were, with few exceptions, obsequious tools. Hence, in Scotland, to be prosecuted for a political offence was, for a lengthened period, nearly equivalent to being condemned. Fortunately, however, this disgraceful state of things has been thoroughly reformed. Juries in Scotland are now fairly selected; the accused has the same right of peremptory challenge as in England; so that, however disposed, the judges can no longer dictate verdicts. The old court of exchequer, commission of teinds, admiralty and consistory courts, are now merged in the court of session.

The number of criminal offenders committed for trial, convicted, and acquitted, was as follows for the fourteen years, 1851-64:—

| Years | Committed for Trial | Convicted | Acquitted |
|-------|---------------------|-----------|-----------|
| 1851 | 4,001 | 3,070 | 1,907 |
| 1852 | 4,027 | 3,018 | 975 |
| 1853 | 3,756 | 2,821 | 907 |
| 1854 | 3,994 | 2,989 | 979 |
| 1855 | 3,630 | 2,689 | 902 |
| 1856 | 3,713 | 2,723 | 951 |
| 1857 | 3,840 | 2,920 | 898 |
| 1858 | 3,782 | 2,850 | 891 |
| 1859 | 3,472 | 2,589 | 880 |
| 1860 | 3,287 | 2,441 | 846 |
| 1861 | 3,229 | 2,428 | 800 |
| 1862 | 3,630 | 2,702 | 928 |
| 1863 | 3,404 | 2,451 | 953 |
| 1864 | 3,212 | 2,379 | 833 |

The inferior courts of law are those of the boroughs, justices of the peace, and sheriffs. The first are called 'bailie' courts, from being presided over by a bailie or alderman, with, in some cases, the assistance of a legal assessor. Their civil jurisdiction within the borough depends on circumstances, being sometimes nearly equivalent to that of sheriffs in cos.; but their criminal jurisdiction extends only to petty riots and common police offences. The justices of peace decide without appeal in actions where the demand does not exceed 5*l.* besides costs. They commit criminals and hold petty sessions, at which two are a quorum, and quarter sessions; but have in no instance the power of transportation.

The sheriff courts are very important, and transact most part of the county business. Each co. has a principal sheriff, called a sheriff-depute, from his being deputed or appointed by the crown; who, in addition to duties similar to those devolving upon English sheriffs, has a very extensive civil jurisdiction. He holds office *ad vitam aut culpam*, his salary varying from 300*l.* to 800*l.* a year, according to the supposed onerousness of his duties. In the cos. of Edinburgh and Lanark, the residence of the sheriff-depute is enforced; but in the other cos. he is rarely resident, his presence not being necessary, except on particular occasions. Sheriff-deputies are, in fact, usually practising lawyers in Edinburgh, and the ordinary business of the co. is devolved on the sheriff-substitutes, or deputies of the principal, who are always resident. In extensive cos. there are usually several sheriff-substitutes. This very useful class of judges must be chosen from advocates, writers to the signet, solicitors of the supreme courts, or solicitors of three years' standing before a sheriff court; and, though nominated by the sheriff-depute, they cannot be displaced without the concurrence of the lord president and lord justice-clerk. At present their salaries, which were raised in 1840, vary from 300*l.* to 550*l.* a year, exclusive of fees. The sheriff, or his substitute, holds small debt-courts for the decision of questions of debt and costs to the amount of 8*l.* 6*s.* 8*d.*, in which the pleadings are all *viva voce*, the expense small, not exceeding 2*s.* 6*d.* or 3*s.*, and the judgment final. In his ordinary courts, however, the authority of which extends to all personal actions without limit of amount, the pleadings are mostly in writing. Until a comparatively late period the sheriff exercised a criminal jurisdiction, extending in some cases to capital punishment; but his powers in this respect are now greatly abridged. He still occasionally tries criminal cases with a jury, but the sentence may be appealed from to the court of justiciary. No sentence, except for petty offences, involving fine, imprisonment, or, at most, banishment from the country or borough, can be pronounced by any legal authority in Scotland without a jury; nor can any person be imprisoned for any debt under 8*l.* 6*s.* 8*d.*

Religious Establishments.—The Roman Catholic religion and the jurisdiction of the pope were abolished in Scotland in 1560; a confession of faith, on Calvinistic principles, drawn up by the celebrated John Knox, was then also agreed to, and the Protestant religion was established by an act of the legislature. Knox, having studied under Calvin at Geneva, introduced the Genevese or Presbyterian form of church government; but, though organised, it did not receive the sanction

episcopacy; and a struggle was carried on between the abettors of episcopacy and presbytery, who alternately prevailed, according as the court or popular party happened to have the ascendancy, till the Revolution, when presbytery was definitively established.

Some, however, of the parishes are collegiate, or have two clergymen; and latterly some of the more extensive parishes have been divided, and assistant, or *quoad sacra*, ministers have been appointed to them. These are called *quoad sacra*, or *quoad spiritualia*, ministers because they are not entitled to participate in the civil endowments belonging to the parish, and are wholly supported by a sum granted annually by the sovereign. These *quoad sacra* clergymen were admitted, by an act of the General Assembly of 1833, members of presbyteries and other church courts. But this act was afterwards found to be illegal by a judgment of the House of Lords.

At present, and since the reign of Queen Anne (1712), the privilege of appointing clergymen to parishes has been vested in the crown or in private patrons, with the proviso that they must be selected from among those who have gone through the course of study prescribed by the church, and been examined and licensed as preachers by a presbytery. The right of patronage has long, however, been exceedingly unpopular. Its enforcement, in despite of public opinion, occasioned the great secession from the church in 1741; and latterly it has become more unpopular than ever. The General Assembly, by a measure, called the *veto* act, passed in 1834, gave the congregations belonging to par. a right to reject a presentee, if he were not acceptable to them: but (unfortunately, as we think) it was decided first by the court of session, and subsequently by the H. of Lords (3 May, 1839), that the General Assembly had no power to pass the *veto* act, and that all proceedings under it were null and void. This decision was not, however, submitted to by the majority of the assembly, by whom it was regarded as an usurpation upon their rights; and no legislative measure having been proposed calculated to allay the public irritation, or to mitigate the extreme exercise of the right of patronage, the leaders of the dominant party in the assembly determined to secede from the church. Accordingly, on the first day (18 May) of the meeting of the General Assembly of 1843, the ministers and elders, members of that body, opposed to the right of patronage and in favour of the *veto*, gave in a protest, stating among other things, that 'the courts of the church as now established, and members thereof, are liable to be coerced by the civil courts in the exercise of their spiritual functions; and in particular in their admission to the office of the holy ministry, and the constitution of the pastoral relation; and that they are subject to be compelled to intrude ministers on reclaiming congregations in opposition to the fundamental principles of the church and their views of the word of God, and to the liberties of Christ's people.' And this protest having been read, the protesters withdrew to a separate place of meeting, and constituted themselves, and such as might afterwards adhere to them, into a body to be denominated the FREE CHURCH OF SCOTLAND. The protest was signed by 125 ministers and 77 elders. But, within a few weeks, no fewer than 470 clergymen seceded from the establishment, and joined the Free Church. Of these, 273 were parish clergymen, being nearly a third part of the total

ceeding sets in a striking light the sincerity and zeal by which the seceders were animated. The voluntary abandonment by so many individuals of their homes and incomes, rather than hold them by compromising what they believe to be a fundamental principle, reflects the highest credit on the Scottish church and character.

The proportion of the members of the various religious denominations in Scotland may be judged from the returns of marriages. In the year 1863, there were altogether 21,201 marriages celebrated in Scotland, of which number 9,769 were contracted according to the rites of the Established Church; 4,861 according to those of the Free Church; 2,936 according to those of the United Presbyterian Church; 1,822 according to those of the Roman Catholic Church; 378 according to those of the Episcopalian Church; and the rest according to the rites of the smaller religious denominations. To judge from these returns, it would appear that 46 per cent. of the population of Scotland are attached to the Established Church; 23 per cent. to the Free Church; nearly 14 per cent. to the United Presbyterian Church; 8½ per cent. to the Roman Catholic Church; little more than 1½ per cent. to the Episcopal Church; and 5½ per cent. to all other denominations.

A presbytery consists of the clergymen of an indefinite number of contiguous parishes, and of an elder from each kirk session. It has cognisance of all ecclesiastical matters within its limits, examines, licenses, or rejects preachers or candidates for the ministry, and reviews the decisions of kirk sessions. Originally presbyteries met every week, but now, in general, only once a month. Appeal may be made from their decisions to the synods.

A synod consists of the clergymen of an indefinite number of contiguous presbyteries, with an elder from each of the different kirk sessions. This court, which usually meets twice a year, reviews the decisions of presbyteries; but its own decisions may be reviewed by the General Assembly, the highest ecclesiastical authority in the kingdom. Subjoined is a statement, exhibiting an account of the number of synods, presbyteries, parishes, and clergymen, belonging to the Church of Scotland.

| Synods | Presbyteries | Parishes | Clergymen |
|------------------------------------|--------------|----------|-----------|
| Synod of Lothian and Tweeddale | 7 | 120 | 128 |
| Merke and Teviotdale | 6 | 66 | 66 |
| Dumfries | 5 | 56 | 56 |
| Galloway | 3 | 37 | 37 |
| Glasgow and Ayre . . . | 8 | 155 | 159 |
| Argyle | 5 | 55 | 57 |
| Perth and Stirling . . . | 5 | 89 | 90 |
| Fife | 4 | 67 | 72 |
| Angus and Mearns . . . | 6 | 84 | 87 |
| Aberdeen | ■ | 108 | 109 |
| Moray | 7 | 56 | 58 |
| Ross | 3 | 27 | 27 |
| Caithness and Sutherland | 3 | 28 | 28 |
| Glenelg | 5 | 41 | 41 |
| Orkney | 3 | 20 | 21 |
| Shetland | 2 | 14 | 15 |
| Total Number . 16 Synods | 80 | 1,023 | 1,050 |

The Scotch Church is a perfect democracy, all the members being equal, none of them having any power or pre-eminence of any kind over another. There is in each parish a parochial tribunal, called a kirk session, consisting of the minister, who is always resident, and of a greater or smaller number of individuals, of whom, how-

The principal duty of the latter is to superintend the affairs of the poor, and to assist in visiting the sick. The session interferes in certain cases of scandal, calls parties before it, and inflicts ecclesiastical penalties. But parties who consider themselves aggrieved may appeal from the decisions of the kirk session to the presbytery in which it is situated, the next highest tribunal in the church.

The GENERAL ASSEMBLY, which consists partly of clerical and partly of lay members, chosen by the different parishes, boroughs, and universities, comprises 386 mems. as follows:—

| | |
|--|---|
| Eighty Presbyteries send, ministers | 218 |
| elders | 24 |
| City of Edinburgh, elders | 2 |
| Sixty-five other royal burghs | 65 |
| University of Edinburgh | } one minister or one elder each } 5 |
| University of Glasgow | |
| University of St. Andrew's | |
| Marischal College, Aberdeen | |
| King's College, Aberdeen | } 2 |
| Churches in India, a minister and an elder . . . | |
| Total number of members | 386 |

The General Assembly meets annually in May, and sits for 10 days; but it has power to appoint a commission, with powers equal to its own, to take up and consider any matters it may have left undecided. The assembly is honoured during its sittings with the presence of a nobleman, the representative of the sovereign, with the title of lord high commissioner. He is merely, however, a state appendage, and cannot interfere in any way with its proceedings. All matters brought before the assembly are decided, after debate, by a vote. Party sometimes runs as high in the assembly as in the H. of C., and the discussions are frequently as acrimonious and as eloquent.

The stipends of the Scotch clergy are principally derived from the wreck of the tithes and other property that belonged to the Rom. Cath. church, which was principally seized upon at the Reformation by the nobility and gentry. The court of session, as commissioners of tiends (tithes), have power from time to time to augment, as they may think fit, the livings of such clergymen as may not be already in the receipt of the whole disposable tithes of their respective parishes. But in many parishes the tithes have been wholly taken up or exhausted; and in 1812 an act was passed to raise, at the public expense, the incomes of such clergymen as had less than 150*l.* a year, exclusive of glebes and houses, to that sum. At this moment, the average income of the clergy of the Church of Scotland, exclusive of the ministers of *quoad sacra* parishes, amounts to about 200*l.* a year, over and above their glebes and houses, the average value of which may be estimated at about 35*l.* a year.

The dissenters from the church, exclusive of the adherents of the Free Kirk, consist principally of the members of the United Presbyterian Synod, the Reformed Presbyterian Church, and the Congregationalists. The first great secession took place in 1741, in consequence, as already stated, of the enforcement of the law of patronage. There are some other bodies of dissenters; and of late years, owing to the influx of Irish into the western cos., the Roman Catholics have received a great accession of numbers.

Historical Sketch.—The early history of Scotland is at once obscure and uninteresting. The country was long one of the most barbarous in Europe; and though Kenneth II. (anno 838) is said to have united the extensive territories from the Tyne N. to the Pentland Frith into one kingdom, it is abundantly certain that various

extensive districts were in great measure independent of the crown for several centuries after that period. In consequence of their early holding Northumberland, Cumberland, and other lands in England, the kings of Scotland were accustomed to appear in the English court to perform homage for these possessions; in the same way as the English monarchs were themselves accustomed to perform homage to the kings of France for Normandy and the other provinces held by them in that kingdom. (Stuart's Public Law of Scotland, note viii.) On the extinction of the direct line of the Scottish kings in 1290, by the death of Margaret of Norway, John Baliol and Robert Bruce, descendants of the Scottish king David I., appeared as competitors for the crown. The pretensions of both were supported by powerful parties; and, to avoid a civil war, it was agreed to refer the matter to the amicable decision of Edward I., king of England. This able and politic prince availed himself of the opportunity to advance the principle, for which the homage that had been performed by the Scotch princes for their English possessions afforded a colourable pretext, that the kings of England were the paramount sovereigns or liege lords of Scotland, and that the competitors for the crown should do homage to him as such. This was consented to; and Edward, finding Baliol most suitable to his views, decided in his favour. The latter, however, being less subservient than was expected, was speedily set aside by Edward, who attempted to seize the kingdom on pretence of its having escheated to him through the rebellion of his vassal.

The nation, however, was not to be so transferred. Sir William Wallace raised the standard of independence; and, in the sequel, the famous Robert Bruce, grandson of the competitor of Baliol, appeared in the field; and after unparalleled exertions, continued through a series of years, the great victory of Bannockburn (1314) secured the independence of Scotland, and established the conqueror and his family on the throne.

The only daughter of Robert Bruce having married the lord high steward, Robert, the issue of that marriage, and the first of the family of Stuart who arrived at the royal dignity, succeeded to the crown on the death of David II., in 1371. From this period, the history of Scotland is comparatively well known; and the continued and extraordinary ill-fortune that attended the lengthened series of princes of the house of Stuart, has vested it with more than ordinary interest.

The principles of the reformers were early introduced into Scotland, and were eagerly adopted by the great bulk of the nobility and people. The Protestant religion obtained the ascendancy in 1560, shortly before the return of the beautiful but ill-fated Queen Mary from France, where she had been sent to be educated. At this period the royal authority was at a very low ebb; the most violent contentions prevailed amongst the nobility; and it would have required a sovereign of no ordinary ability and energy of character to conduct the government under such difficult circumstances. We need not, therefore, be surprised at the failure of Mary, who, though not without good talents, was wholly inexperienced, at the same time that she had the misfortune to have been strongly imbued with anti-Protestant prejudices, and that the violence of her passions made her sacrifice her own reputation and innocence, and the well-being of the kingdom, to their gratification. Having been deposed in 1567, Mary was succeeded by her son, James VI., then a minor. The latter suc-

kingdoms were happily united under one sovereign.

From the accession of the house of Stuart to the union of the crowns, a period of about 230 years, Scotland, speaking generally, was in a most unsettled, turbulent state. The feudal system had been early introduced into the country; and the great estates and influence enjoyed by several of the nobles enabled them to rival the sovereign in power and importance, and sometimes to despise his orders and insult his person. In France, England, and other countries, the sovereigns, by enfranchising the inhabitants of the great towns, and attaching them to their interests, succeeded, through their assistance, after a lengthened struggle, in abating the pride and independence of the barons, and reducing them to obedience. But the kings of Scotland had no such support on which to fall back: there was not, in fact, a single great town in the kingdom; and they had nothing to trust to but the supplies of men and money they could draw from the crown estates, and from the contributions of such of their vassals as happened to be at the time in their interest, or whom they could coerce. In consequence of these and other concurring causes, the power of the Scottish kings was circumscribed within the narrowest limits; the civil broils in which they were almost always engaged were, in most instances, fomented and abetted by the government of England; and, a few short intervals excepted, the country was involved in continuous anarchy and confusion.

The union of the crowns, in 1603, introduced a great change for the better into the state of domestic affairs in Scotland. The barons could no longer look to England for open or underhand support in their contests with their sovereigns; while, at the same time, the power of the latter was vastly increased by their being able to employ the resources of a much more civilised, populous, and powerful monarchy in their disputes with their ancient subjects. Hence, though Scotland laboured under numerous grievances, resulting principally from the unreasonable hostility of the sovereigns to the Presbyterian form of church government, to which the people were enthusiastically attached, she gained prodigiously in tranquillity and good order subsequently to 1603.

The union of the kingdoms, in 1707, was, as it were, the necessary result and completion of the union of the crowns. Though excessively unpopular at the time, and opposed by many of the best Scotch patriots, it has been of vast advantage to Scotland, as well as to the empire generally. The consequences of the rebellion of 1745 were also advantageous, notwithstanding the unnecessary cruelty exhibited in its suppression. It extinguished for ever the long-cherished hopes of the Jacobites, and it stimulated government to take effectual measures for abating the barbarism that prevailed in the Highlands, and for the introduction of a more efficient administration of justice into all parts of the country.

SCUTARI (an. *Chrysopolis*), a town of Asiatic Turkey, being however, in fact, a suburb of Constantinople, opposite the latter, on the other side of the channel of Constantinople, on the Bithynian shore, about 1½ m. E. Scraglio Point. Pop. estimated at 24,600 in 1862. The town is built on the declivity of several hills, and has a very picturesque appearance from the opposite shores: its interior is similar to that of the Turkish capital, and it is built in the same style. A palace of the sultan, with extensive gardens, barracks constructed by the late Sultan Mahmoud, several

baths and bazaars, are the principal edifices and public establishments. It is a rendezvous for the merchants and caravans from Armenia and Persia trading to Constantinople, and is the first station for the assembling of the Turkish troops in Asia.

Scutari is very ancient, and is said to owe its an. name of *Chrysopolis* to the circumstance of the treasury of the Persians having been established in it when they attempted the conquest of Greece. Its vicinity was memorable from the decisive victory obtained by Constantine the Great over his rival Licinius.

SCUTARI, a fortified town of European Turkey, and the cap. of a pachalic in Albania, S. of the lake Scutaro (an. *Labeatis Palus*), at the confluence of the Bojana and Drinassi, about 16 m. from the embouchure of the former in the Gulf of Drino, in the Adriatic, 45 m. SE. Cattaro. Pop. estimated at 20,000. It has a pretty strong citadel, on an isolated rock; with various mosques and Greek and Rom. Cath. churches. It stands on uneven ground, and is built in a very straggling manner. A rather active trade in timber is carried on by vessels which ascend the Bojano to the lake; the inhabs. also manufacture cotton fabrics and arms, and build small vessels. Scutari is supposed to occupy the site of the an. *Scodra*, the cap. of the Illyrian king Gentius, and which subsequently appears to have become a Roman colony. It is still a place of importance.

SCYLLA and CHARYBDIS: the former a famous rock and town of S. Italy, at the N. entrance to the narrow strait separating Italy from Sicily; and the latter an equally famous whirlpool in the strait near the Sicilian coast. Scylla is a bold rocky headland, about 200 ft. in height, projecting into the sea, and hollowed at the base into caverns by the action of the waves. It is surmounted by a castle, in lat. $38^{\circ} 14' 15''$ N., long. $15^{\circ} 44'$ E. There is a sandy bay on each side the rock; and the town of Scylla, built principally on the steep acclivities of the ridge, stretches down to the shore on either side. It has about 5,000 inhabs., expert fishermen, scamen, and divers.

This little town suffered tremendously from the earthquake that devastated Calabria in 1783. A large portion of the inhab., with the prince at their head, fled to the beach, believing it to be least exposed to danger. But they had not been long there when an adjoining cliff fell into the sea; and the waves, driven back by its fall, rushed forward again with such tremendous fury as to rise high upon the shore, sweeping along with them in their recoil 2,475 persons, not one of whom escaped alive.

The rock of Scylla is 6,047 English yards, or nearly $3\frac{1}{2}$ m. from the opposite point of Faro, at the NE. extremity of Sicily. The whirlpool of Charybdis is not, however, opposite to Scylla, but within the strait outside the tongue of land enclosing the harbour of Messina. From its prominent position at the mouth of the straits, Scylla is exposed to the full action of the current, the sea making a loud noise in the caverns it has hollowed in the rock, which, of course, is much increased in storms. Charybdis seems to be formed by the main current passing through the straits from the N. being thrown over to the Sicilian shore by the point of Pezzo, and meeting the lateral current running in an opposite direction. It is from 70 to 90 fathoms deep, circling in quick eddies. But, notwithstanding the action of the contrary currents, and the formidable appearance of Charybdis, there is no longer any real danger in navigating the straits, provided due caution be

that Homer, in depicting the terrific dangers encountered by Ulysses in this famous strait (see Pope's *Odyssey*, lib. xxi. lin. 87), has made a very liberal use of the licence allowed to a poet, still it is abundantly certain that it must have been much more dangerous in antiquity than at present. It was a generally received opinion among the ancients, that Italy and Sicily were once united, and that they had been torn asunder by some great convulsion of nature. Pliny says, '*Sicilia, quondam Bruttio agro coherens, mox interfuso mari avulsa.*' (Lib. iii. cap. 8; see also Silius Italicus, lib. xiv. lin. 2; Virgil.) But whether this were so or not, it is plain that the action of the current for a period of more than 3,000 years must have materially widened and deepened the strait, and worn down those rocky prominences that render such narrow channels peculiarly dangerous. The configuration of the strait has also, no doubt, been materially altered in the interval by the earthquakes so prevalent in this region; so that we are by no means entitled to ascribe the statements of the ancients, in regard to its dangers, solely to their ignorance of navigation or their love of the marvellous.

Vessels in passing through the straits, in order to avoid coming within the vortex of Charybdis, sometimes run upon Scylla, which gave rise to the famous proverbial expression—'*Incidit in Scyllam cupiens vitare Charybdim.*' applicable to those who, to avoid a less, run into a greater danger.

SEBASTIAN (ST.), a fortified frontier city and sea-port of Spain, cap. prov. Guipuscoa, in Biscay, at the extremity of a low sandy tongue of land, projecting into the Bay of Biscay, 10 m. W. by S. Fuenterrabia, and 40 m. ENE. Bilbao. Pop. 9,047 in 1857. St. Sebastian having been in a great measure rebuilt since 1813, it is now one of the neatest and most regularly constructed towns in the peninsula, presenting a favourable contrast to most other Spanish cities. It is defended on the E. and W. by strong walls, washed by the sea; on the N. by the castle of Mota, on Mount Urgullo, a rugged cone near 400 ft. in height; and on the S. it is shut off by advanced military works, and by the little river Urumea, from its suburb of St. Catherine. The castle is well supplied with water, and is a fortress quite independent of the city, with which it communicates by two routes, both defended by various batteries. St. Sebastian has some handsome squares, several churches and convents, and a civil and military hospital; its streets are clean, and it is abundantly supplied with water, though not of the best quality. The Urumea is crossed by a stone bridge of 8 arches. Though secure, and well defended, the harbour is difficult of entrance; it is formed by a mole, and is of small size. St. Sebastian has always been a place of considerable trade, and was the seat of the Philippine Company. It is the port whence Pampeluna, Vittoria, and Logrono, obtain most part of their supplies of colonial and other foreign goods; and at which the greater part of the French and English manufactures destined for Madrid, and other towns in the interior, are imported. Its exports are chiefly iron and wool. It had formerly some large cordage factories and tanneries, but these have mostly fallen into decay. It is the residence of a military governor, 2 justices, and the seat of a sub-delegation of police; a lottery department and a tribunal of commerce. From its being one of the keys of Spain, its possession has always been an object of great importance in the contests between the French and Spaniards. The former took it in 1719, 1794, and 1808; and held it from the last-mentioned epoch

under Sir Thomas Graham, now Lord Lynedoch. The latter were repulsed in their first attempt to carry it by storm in July; but they succeeded, though not without an enormous loss, in the second assault on the 31st of August. A fire having broken out in the town during the assault, it was all but destroyed.

SEDAN, a fortified town of France, on its NE. frontier, *dép.* Ardennes, *cap. arrond.*, on the Meuse, 12½ m. ESE. Mezières. Pop. 15,536 in 1861. Though an important frontier town, its works, some of which were constructed by Vauban, have latterly been neglected; and its citadel, at its SE. extremity, has been converted into an arsenal. The town stands on very uneven ground, and is separated into two unequal parts by the Meuse, here crossed by a stone bridge. It is well built; the streets, which are wide and clean, are ornamented with numerous fountains; the houses are mostly of stone, roofed with slate, and in the environs are various public walks. Sedan has excellent cavalry and other barracks, a military hospital for 500 patients; other military establishments; a Calvinist, and several Rom. Catholic churches, a public library, communal college, and a handsome theatre. It is the seat of a tribunal of primary jurisdiction and a chamber of manufactures.

Sedan has been long celebrated for its woollen manufactures, consisting principally of fine black cloths and cassimeres. On an average, from 11,000 to 12,000 workpeople are employed in the woollen manufactures of the town and its vicinity, of whom from 3,000 to 4,000 belong to the town; from 2,000 to 2,500 belonging to the neighbouring villages, go to work daily within the town; and the remainder, consisting principally of weavers, inhabit the country for a distance of from three to four leagues round. The last, who also occupy small patches of land, work at the loom in their own cottages; whereas those who live in and near the town are mostly employed in large manufacturing establishments. The greatest harmony subsists between the workpeople and the manufacturers. Instruction is much more extensively diffused among the workpeople than at Rheims, and, speaking generally, they have all the signs of good health; circumstances chiefly consequent on the non-introduction of children into the factories at too early an age. Hosiery, leather, arms, and hardware are also produced at Sedan; and it has numerous dyeing-houses, with an extensive trade in drugs.

Previously to the Revolution, Sedan was the *cap.* of a principality, which had often changed hands in the middle ages, but which was finally exchanged with Louis XIV. for some other fiefs by the Turenne family. One of the greatest of the French generals, the famous Marshal Turenne, was a native of this town, in the citadel of which he first saw the light on the 16th of September, 1611. His statue, in bronze, ornaments the principal square.

SEGORBE (an. *Segobrigar*), a city of Spain, *cap. distr.* of its own name in Valencia, near the Palancia, 18 m. NW. Murviedro. Pop. 7,232 in 1857. The town has several squares, numerous public and private fountains, a cathedral in which are some good paintings, several convents, a prison, workhouse, and other public edifices. Its inhabitants are occupied in the manufacture of starch, earthenware, and paper, the distillation of brandy, and the quarrying marble in the vicinity. Two large fairs are annually held here. Various Roman antiquities have been found within

Castile, *cap.* of the prov. of its own name, 48 m. NNW. Madrid, with which it is connected by railway. Pop. 10,339 in 1857. The city is built on two hills and the intervening valley, the unevenness of the site giving it a wild look. Most of the streets are crooked and dirty, the houses also are ill-built, and chiefly of wood. The public buildings comprise 18 churches, including the cathedral, 5 hospitals, a mint, a college for cadets in the old castle or Alcazar, and military barracks. The cathedral, one of the handsomest churches in Spain, has a tower 330 ft. high, and exhibits a mixture of the Gothic and Arabian styles, nearly resembling that in the great church at Salamanca. The interior is characterised by a simplicity rarely seen in Spanish churches, the effect of which is infinitely superior to that of the gildings and ornaments elsewhere observable. The Alcazar is in great preservation, occupying a commanding situation on a rock rising above the open country. Towards the town is a large court before the great outward tower, formerly used as a prison, but now as a college of cadets. The rest of the buildings form an antique palace, once the favourite residence of Ferdinand and Isabella: it comprises several magnificent halls, with gilt ceilings, and along the cornice of the grand saloon are fifty-two wooden statues of the kings of Spain seated in state. The military college was remodelled on the formation of the present constitution, and the instruction given by the professors embraces most branches of knowledge connected with military science.

The great glory of Segovia is its aqueduct, supposed to have been built in the time of Trajan, and certainly one of the most perfect specimens of Roman architecture in Spain. It is not only an admirable monument for its solidity and good masonry, which have withstood the violence of barbarians and the inclemencies of the seasons during so many ages, but is wonderfully beautiful and light in its design. It consists of 161 arches, in two ranges, that nearest the ground comprising 118, of which 48 are surmounted by an equal number of others: the whole is built of square stones, without mortar, and at the top is a channel, one hollow, but now filled up, only 8 ft. wide, and without a parapet. The total length of the aqueduct is 750 yards, and its height in crossing the valley (measured close to the *Plaza del Azoguejo*, where two of the arches cross the street) is estimated at 102 ft.

The mint of Segovia, the most ancient in Spain, is situated at the bottom of the city, on the small river Eresma, the water of which turns its machinery: for many years, however, its operations have been confined to the coinage of maravedis, quartos, and other copper pieces. Segovia is said to be a decayed city, and most books on Spain contain accounts of the former flourishing state of its woollen manufactures; but these accounts are very greatly exaggerated, and, when most flourishing, the number of looms in Segovia did not exceed 300 (*Questiones Criticas*, p. 37), which, perhaps, is about their present number. It also produces paper, earthenware, and glass. A fair held here in June is much frequented. In the neighbourhood are mines of lead and copper, as well as quarries of black marble.

The early history of Segovia is somewhat obscure; but, like most other cities of Castile, it belonged successively to the Romans, Goths, and Moors, from the last of whom it was taken at the beginning of the 15th century. During the Peninsular war the town was occupied by the

wealthy, and important *dép.* of France, being that in which the capital is situated. It extends between lat. $48^{\circ} 43'$ and $48^{\circ} 58'$ N., and long. $2^{\circ} 10'$ and $2^{\circ} 35'$ E., being entirely surrounded by the *dép.* Seine-et-Oise. It is of a nearly circular shape, about 15 m. in diameter. Area, 47,548 hectares. Pop. 1,953,660 in 1860. The Seine traverses this *dép.* in its centre, with a general direction from NW. to SE., and receives the Marne within its limits. There are a few hills, but none of much elevation. Mont-Valerin does not rise to 450 ft. above the level of the Seine, and Montmartre is only 344 ft. in height. The soil is chiefly calcareous, this *dép.* forming the centre of the remarkable tertiary region called the Paris basin. (See PARIS and FRANCE.) But the chalk is covered with a bed of vegetable mould of considerable thickness; and the manure supplied by the capital renders the *dép.* very productive. The arable lands are estimated at 29,295 hectares; meadows, 1,543 ditto; vineyards, 2,784 ditto; and orchards and gardens, 3,502 ditto. Corn is not extensively raised, and the little that is produced is but indifferent. It furnishes very superior peaches and other fruits, and there are numerous market gardens for kitchen vegetables. A good many cattle, and other live stock, are fattened for the Paris markets, and there are some flocks of superior sheep. The manufacturing industry centres in Paris.

SEINE (an. *Sequana*), a river of France; and though by no means the largest, yet one of the most important in the kingdom, being that on which the capital is built. It rises in the *dép.* and mountain-chain of the Côte d'Or (by which it is separated from the basin of the Loire), about lat. $47^{\circ} 30'$ N., long. 5° E., 20 m. NW. Dijon. It flows generally in a NW. direction, between the basins of the Loire on the SW., and of the Meuse and Somme on the NE., through the *déps.* of Aube, Seine-et-Marne, Seine-et-Oise, Seine, Eure, and Seine Inférieure, to the British Channel, which it enters by a wide æstuary at Havre, about lat. $49^{\circ} 30'$ N., and long. $0^{\circ} 10'$ E., nearly opposite Newhaven in Sussex. Its entire course, in consequence of its numerous windings, is estimated at 500 m., for nearly 350 of which it is navigable. Its source is about 1,420 ft. above the level of the sea. But more than three-fourths of its descent takes place within the first 100 m. of its course, for at Troyes it is not more than 440 ft. above the sea, and at Paris its mean elevation above the latter is only 51 ft., and at Rouen 26 ft. (Bruguière, *Orographie*.) From its not rising in mountains of any great elevation, it is neither subject to serious inundations, nor has it a rapid current; and the latter circumstance, together with its gentle rate of descent in the lower parts of its course, renders it highly suitable for navigation. The chief obstacles to its utility are the shifting sand-banks in its æstuary, and some shallows between Quillebeuf and Rouen. At Paris the Seine is from 300 to 500 ft. in width, at its mouth it is 7 m. in width. It is here subject, at the return of every tide, to a phenomenon termed the *barra*, similar to the *nascaret* in the Dordogne, the *bore* in the Solway Frith and Ganges. This consists of a wave of great magnitude, with an almost perpendicular front, impelled inwards from the sea with much violence as high as Jumièges, and sometimes even as far as Rouen. It gives notice of its approach by a noise which is heard for forty minutes beforehand, but it is, notwithstanding, frequently productive of damage to shipping. The tide in the Seine is usually perceptible as high as Rouen, to which city the river is navigable for vessels of 200

tons. Respecting the trade of the Seine, see the articles HAVRE and PARIS.

The Seine receives several considerable tributaries: as the Aube, Marne, and Oise, from the NE., and the Yonne, Eure, and Rille, from the S. and W. Besides Paris, several large and flourishing commercial cities and towns are seated on the Seine: as Rouen, Elbeuf, Troyes, Melun, and Montargan, with Chatillon, Bar, Nogent, Corbeil, St. Germain, and Honfleur; and at its mouth is Havre, which, Marseilles excepted, is the first commercial port of France.

The Seine and its tributaries are connected by the canals of Briare, Orleans, and Nivernais, with the Loire; by that of St. Quentin with the Somme and Scheldt; by that of Ardennes with the Meuse, and by that of Burgundy with the Loire. The canal of Ourcq (see PARIS) also communicates with it. The banks of the Seine below Paris have been much praised for their beauty.

SEINE-INFÉRIEURE, a maritime *dép.* of France, reg. N., formerly comprised for the most part in the prov. of Normandy, having E. the *déps.* Somme and Oise, S. Eure and Calvados, and W. and N. the British Channel. Area, 608,329 hectares. Pop. 789,988 in 1861. The S. boundary consists mostly of the Seine and its æstuaries. There are some hill chains, but none of much consequence. Coasts in general abrupt, presenting a succession of calcareous cliffs. Climate moist, and colder than on the opposite coast of England. Soil generally calcareous or sandy; but in the arronds. of Havre and Yvetot there are some very fertile tracts, consisting of a fine light clay. The surface is distributed as follows: 378,016 hectares arable, 28,024 do. meadows, 61,173 do. orchards and gardens, and 68,844 do. woods. Agriculture is more advanced in this than in most other *déps.* Ploughs of a superior kind have latterly been introduced; the efficiency of manures is well understood; and fallows have been to a considerable extent superseded by the introduction of an improved rotation. Near Havre, on the large farms only, a few acres are in fallow: of the arable land, about one-third part may be in wheat; one-third in oats, barley, and rye; one-sixth in clover; one-twelfth in peas and vetches, and one-twelfth in flax; and these are about the proportions throughout most part of the *dép.* The proportion of large properties is greater in this than in any other *dép.* of France. The large proprietors seldom or never farm their own lands. Some farms run from 200 to 800 acres, but in general they are much smaller: they are almost always let for a term of 9 years, at a rent varying from 30s. to 50s. per hectare, which is always paid in money. A good deal of cider is made, and most of the peasants' cottages are surrounded by small orchards. Cattle, horses, and sheep are all of good breeds, and are among the best in France: the produce of wool is estimated at about 653,000 kilogs. a year. Wages are high. Farm servants always live with their masters; and ploughmen receive from 8*l.* to 12*l.* sterling a year; women from 3*l.* to 6*l.*, generally in money. Their food consists of bread, vegetables of all kinds, soup, eggs, and cheese, with cider for drink; and butchers' meat once or twice a week. The occupiers of farms are prosperous, though not rich. The farmer pays the land, house, window, and personal taxes, and is frequently called on for the support of paupers. The latter are numerous, and as no legal provision is made for them, they are wholly dependent upon voluntary contributions. The *dép.*, which ranks third in France with respect to pop., is inferior to none in manufacturing industry. Rouen (which see) is at the head of the

cotton manufacturing towns, and Elbeuf is one of the chief seats of the French woollen manufacture. Manufactures of most other descriptions are carried on; and the *dép.* has, through Havre, a most extensive trade with England, America, and most parts of the world; and by the Seine, with Paris and the interior of France. It is divided into 5 arronds; chief towns, Rouen, the cap., Dieppe, Havre, Neufchâtel, and Yvetot.

SEINE-ET-MARNE, a *dép.* of France, reg. N., mostly between the 48th and 49th deg. of N. lat., and long. 2° 30' and 3° 30' E.; having N. the *déps.* Oise and Aisne; E. Aube and Marne; S. Yonne and Loiret; and W., the last-named and Seine-et-Oise. Area, 573,635 hectares. Pop. 352,312 in 1861. Surface, undulating; its slope being from E. to W. The highest hills are in the S. The Seine, here joined by the Yonne, traverses the S., and the Marne the N. part of the *dép.* The Oureq, Loing, and Grand Morin are the other principal rivers. The geological formations are mostly calcareous, overlain in many parts by a deep layer of vegetable soil. This is one of the finest agricultural *déps.* in France, and has a good deal of rich land. It is said to comprise 367,824 hectares arable land, 33,293 ditto meadows, 18,972 ditto vineyards, 6,607 ditto orchards and gardens, and 79,862 ditto woods. It has a large surplus of corn, principally wheat and oats, for exportation. Potatoes are, also, pretty extensively grown. The produce of wine may amount to nearly 600,000 hectols.; but it is mostly of low quality, and is principally used for home-consumption only. Cyder is also produced. Meaux is finely situated in the midst of rich natural pastures, which fatten great numbers of cattle, and the dairy husbandry is also carried on to some extent. The breed of sheep has been much improved by crossing with the Merino breed, and the total annual produce of wool is estimated at 1,200,000 kilogs. Wax and honey are important articles. No mines are wrought, but a good many hands are employed in quarrying paving and other stone. Manufactures principally of cotton and linen fabrics, hardware and cutlery, earthenware, leather, and paper. This *dép.* is divided into 5 arronds; chief towns, Melun, the cap. Coulommiers, Fontainebleau, Meaux, and Provins.

SEINE-ET-OISE (formerly *Isle-de-France*), a *dép.* of France, reg. N., principally between lat. 48° and 49° N., and long. 1° 30' and 2° 30' E.; having N. the *dép.* of Oise, E. Seine-et-Marne, S. Loiret, W. Eure and Eure-et-Loire: it encloses the metropolitan *dép.* of the Seine. Area, 560,537 hectares. Pop. 513,073 in 1861. It has no hill 400 ft. in height. The Seine traverses this *dép.* from NW. to SE., receiving the Oise and Essonne within its limits. As it belongs to the great tertiary basin of Paris, the soil of the *dép.* is principally calcareous; a large portion, however, is sandy; and it is not particularly fertile, except in the neighbourhood of Paris, where it is liberally manured. According to the official returns, the arable lands comprise 367,741 hect.; meadows, 20,091 do.; vineyards, 16,711 do.; orchards, 7,660 do.; and woods, 77,213 do. Principal corn crops, oats and wheat. The annual produce of wine is estimated at about 700,000 hectol., but it is of very indifferent quality: cyder is also produced, to the extent of about 100,000 hect. a year. The culture of figs, cherries, strawberries, and other fruits and vegetables for the Paris markets, is an important branch of industry. A good many sheep are bred, and cows for their milk, which is sent to Paris; but few other kinds of live stock

rise to a great variety of manufactures. Yarn and stuffs of all kinds, paper, hair fabrics, leather, earthenware, beet-root sugar and chemical products, are among the goods manufactured. The *dép.* has a very extensive general trade. It is divided into 6 arronds; chief towns, Versailles, the cap., Mantes, Pontoise, Rambouillet, Etampes, and Corbeil.

SELBY, a market town, river port, and par. of England, W. riding, co. York, chiefly in Barkston-Ash wapentake, on the Ouse, 11 m. S. by E. York, on a branch of the Great Northern railway. Pop. of town, 5,271, and of par. 5,424 in 1861. Area of par. 3,180 acres. The town is well built, paved, and lighted, and has latterly been much improved. A handsome Gothic market-cross, the par. church, and the town-hall, a neat brick edifice built in 1825, are the principal public buildings. The church is a portion (almost the only one remaining) of Selby Abbey, founded by William the Conqueror in 1069, in which Henry I. was born. It is a large and magnificent cross church, of mixed Norman and early English architecture. The choir is a most beautiful specimen of decorated work; the E. end is peculiarly fine, with very beautiful windows and octagonal turrets, having rich pinnacles. It has some very superior stone screen-work and ancient stained glass. Selby has places of worship for Friends, Independents, Calvinists, Wesleyans, Unitarians, and Rom. Catholics; a grammar-school founded by Edward VI., and a hospital for seven poor widows. The Ouse, which is here crossed by a bridge, is navigable to Selby for vessels of considerable burden; and it carries on an extensive intercourse by water with Goole and Hull. It is also connected by railways with Hull and Leeds; and a branch custom-house being established here, it has become a considerable *entrepôt*. It has also manufactures of sail-cloth, leather, and iron good, and slips for building river craft. Petty sessions for the wapentake are held here, and courts leet and baron twice a year by the lord of the manor. Market day, Monday; Fairs, Easter Tuesday, Monday after June 22, and Oct. 10, for cattle, wool, linen, tin, and copper wares.

SELKIRK, an inland co. of Scotland, being one of the smallest and the least populous in that part of the United Kingdom, having N. Mid-Lothian, E. Roxburgh, S. Dumfries, and W. Peebles. Area, 169,280 acres, of which not more than one-tenth is supposed to be arable. This co. is, in most respects, similar to that of Peebles, and the statements as to the one will apply, with little modification, to the other. The greater part of the surface is mountainous; but the hills are green and smooth to the summits, and afford excellent sheep pasture. The co. is watered by the Tweed, and its two tributaries, the Ettrick and Yarrow: there is some excellent arable land in the valleys traversed by these rivers, but the extent is inconsiderable. Selkirk has fully participated in the wonderful improvements that have been made during the last half century in most parts of Scotland. Its agriculture, breeds of cattle and sheep (now wholly Cheviot), roads, buildings, food and clothes of the inhabitants, have all been signally improved. The woollen manufacture is carried on with spirit and success at Galashiels. The co. sends 1 mem. to the H. of C. Registered electors, 504 in 1865. Selkirk is divided into seven parishes, and had, at the census of 1861, 1,468 inhab. houses, and 10,449 inhabitants, while in 1841 it had 1,446 inhab. houses, and 7,989 inhabitants.

SELKIRK, a market town and royal bor. of Scotland, cap. of the above co., on the W. side of a

bank of the Ettrick, and 33 m. SE. by S. Edinburgh, on the road leading from the latter to Carlisle. Pop. 3,695 in 1861. The town consists chiefly of one wide, irregular street, which, at the market-place, expands into a triangular open space. The only public buildings are the town-hall, with a spire 110 ft. in height; a gaol, the parish church, and a chapel belonging to the United Associate Synod. Besides schools, it has a mechanics' institute, three subscription libraries, and a reading room. Mungo Park, the African traveller, was born within a mile of the town, and a monument has been erected to his memory. Abbotsford, the seat of Sir Walter Scott, on the right bank of the Tweed, is within 4 m. The town has no manufactures; but on the neighbouring banks of the Ettrick are woollen mills, for making hosiery, tweeds, blankets, and similar stuffs. In remote times Selkirk was distinguished for its manufacture of shoes; hence the expression 'souters (shoemakers) of Selkirk' was, and still is, used as denoting the whole inhabitants. But shoe-making is not now carried on to any considerable extent.

Selkirk was in ancient times a royal residence, *The Forest*, as the co. was once called, forming a favourite hunting field of the Scotch monarchs. Its history is intimately connected with the border wars. A standard, taken from the English at the battle of Flodden, by the 'souters of Selkirk,' is still preserved. The battle of Philiphaugh (1645), in which the Marquis of Montrose was signally defeated by General Leslie, was fought within 1½ m. of the town. Since the Reform Act, the bor. electors have been added to those of the co.

SEMLIN, a frontier town of the Austrian empire, in Slavonia, on the Danube, 3 m. NW. Belgrade, and 40 m. SE. by E. Peterwardein. Pop. 12,978 in 1857. The inhabs. are a motley collection of Slavonians, Germans, Greeks, Servians, Croats, Gipsies, and Jews. Semlin consists of an inner town and a suburb: it is not fortified, but surrounded with a stockade. It has some good houses and churches, but its streets are mostly unpaved, mean, and dirty. At its N. extremity is the ruined castle of the famous John Huniades: it stands on a commanding height, having on its sides the huts of the Gipsy quarter. Semlin has a large quarantine establishment, at which travellers entering from Turkey are usually detained for from 10 to 40 days. The hospital, a high female school, and a German theatre, are the other principal public establishments in the town, which is the residence of a Greek *protopapas*, and the chief entrepôt of the trade between Austria and Turkey. Its principal imports from the latter are raw cotton and cotton twist, honey, saffron, hare and rabbit skins, and pipe-bowls; its exports, woollen stuffs, earthen and glass wares, and other manufactured goods.

SEMPACH, a small town of Switzerland, canton Lucerne, on the E. bank of the lake of same name, 7 m. NW. Lucerne, famous in Swiss history for the victory gained in its vicinity on the 9th of July, 1386, by a Swiss force of about 1,400 men, over 4,000 Austrians, commanded by the archduke Leopold II. The Swiss historians ascribe their success in this battle to the patriotism and devotion of a knight of Unterwalden, who, grasping a number of the spears of the Austrian pikemen in his hands, showed his countrymen, at the expense of his own life, how they might make their way into the enemy's phalanx. But, whatever truth there may be in this story, it is probable that the easy and complete victory of the Swiss was principally owing to the fact of the archduke having been killed at the beginning of the action, and to the panic his death produced in his army.

Besides the duke, about 2,000 Austrian troops fell in the battle and pursuit, while the loss of the Swiss is said not to have exceeded 200 men.

SENAAR. See NUBIA.

SENEFFE, a village of Belgium, prov. Hainault, 6 m. SW. Nivelles, famous from its vicinity having been the scene of one of the most sanguinary conflicts of modern times. Here on the 11th of August, 1674, a French army, under the famous Prince of Condé, attacked the rear-guard of the Confederates, commanded by the Prince of Orange, afterwards William III., and gained a considerable advantage. But, not satisfied with this, Condé imprudently attacked the main body of the Confederates, who had taken up a very strong position, on which, notwithstanding the most astonishing efforts, he could make no impression. The loss on both sides was nearly equal; and such was the slaughter, that above 20,000 men were left on the field of battle. In fact, to use the words of Voltaire, '*La grande et célèbre bataille de Senef ne fut qu'un carnage.*' (Siècle de Louis XIV, cap. 12.) Both armies withdrew next day, neither attempting to molest the other. This was the last great battle fought by the Prince of Condé. A well-known *bon mot*, ascribed to the prince in reference to this conflict, is of very doubtful authenticity.

SENEGAL, a large river of W. Africa, which, till the time of Delisle and D'Anville, was considered identical with the Niger of the ancients, but which is now ascertained to be wholly unconnected either with the Quorra, or with the Nilotic system of the African continent. Its sources are separated from the basin of the Niger and Quorra by the Mandingo terrace. The Ba-ting (black-water), regarded as the main stream, rises in this mountain region, in about lat. 10° N. and long. 11° W. Its course is generally NW. to near lat. 16° and long. 17°, when it turns W., and falls into the Atlantic a little below the French settlement of St. Louis, after a course estimated at 1,000 m. Its chief affluents are, the Kokoro on the right, and the Falcémé on the left, both of which join it in the upper half of its course. Timbo stands near the head of the Ba-ting: on its banks are the French forts of Faf, Dagana, Podhor, Bakel, St. Joseph, and Mussala. The early course of this river and its tributaries is through a broken country, diversified by rugged and precipitous hills, and intersected by numerous streams, the sands of which are copiously impregnated with gold dust. At Fellou, from 400 to 450 m. from the sea, it forms a cataract, up to which it is navigable all the year for flat-bottomed boats. After passing Galam, the Senegal rolls over a level plain, with a very gentle current; and after passing Podhor, a French station about 60 leagues from its mouth, the level is so complete, that the total fall of the river from that station to the sea is little more than 10 ft. The tide is perceptible in the river for upwards of 60 leagues inland. The Senegal, in this part of its course, is bordered by vast forests, obstructed by thick underwood, and filled with numberless species of wild beasts and birds. At about 35 m. (direct distance) from the ocean, the Senegal divides into two arms, which enclose a delta. The principal or E. arm is deep enough to be navigable for the largest ships, but is obstructed by a bar at its mouth, which cannot be crossed, except during the inundations, by ships drawing more than from 10 to 12 ft. of water. Vessels under this draught may, however, always navigate the river as far as Podhor, and in the rainy season vessels of from 130 to 150 tons ascend to Galam. Like the Nile, the Senegal annually overflows and fertilises the adjacent country; and in July, when the inundation begins, some French vessels sail up as far as

the river is navigable, trading with the natives for gum and other products. A fair, lasting 15 days, is held annually at Fort St. Joseph. After this, as soon as the waters begin to subside, the vessels return, spending only about a fortnight in the downward journey, but consuming nearly three months in their upward voyage.

The Senegal forms a part of the line of demarcation between two regions widely differing in every respect. To the N., within a few miles of its banks, is the great desert of Sahara, with here and there a few Moors; while to the S. are the fertile regions of Nigritia, inhabited by negroes.

SENEGAL, a name derived from the above river, given to some small French colonial establishments on the W. coast of Africa, comprising several islands, and small portions of the African continent, between the Senegal and Gambia rivers. It is divided into two arronds., the N. consisting of the isles of St. Louis, Baragbé, Safal, and Gbeber, near the mouth of the Senegal, with some few establishments on the banks of that river, and trading stations along the coast between Capes de Verd and Blanco; and the S. arrond., comprising the island of Goree, Albreda, on the bank of the Gambia, and the other stations S. of Cape de Verde. The total pop. of these dependencies amounted, in 1861, to 18,760, of whom about 18,000 were Mohammedans and blacks: two-thirds of the pop. inhabited St. Louis and its arronds.

This part of the African coast is nearly destitute of good harbours: those of St. Louis and Goree are the best. The soil of the isles and continental shore is sandy, but improves in quality further inland, where it is covered, S. of the Senegal, with dense forests, and the most luxuriant vegetation. The climate, though not so pestiferous as that of Sierra Leone, is extremely bad. The heat of summer is most relaxing and oppressive, especially during E. winds, though the thermometer does not stand extremely high. The wet season, which lasts, with S.W. winds, from June till October, is particularly fatal to Europeans, who are attacked with dysenteries, liver complaints, and various kinds of fevers. The mineral products are few. There are traces of iron, but little ore is wrought. Basalt is found at Goree, but scarcely any stone elsewhere; and at St. Louis the most solid buildings are only of brick. Gold is procured from the countries towards the head of the Senegal, but the efforts of the French to form settlements there have hitherto proved abortive. Near the mouth of the Senegal are some salt-pans, and in some parts of the interior natron effloresces on the soil. The vegetable products are the most varied and abundant. They include the gigantic baobab (*Adansonia digitata*), palms, mimosas, and gum trees of numerous kinds, Senegal ebony, and other valuable timber, with cotton, indigo, coffee, amatto, olives, hemp, and other fibrous plants, cassia, sweet potatoes, millet, and maize. Among the wild animals are the elephant, lion, hippopotamus, wild boar, buffalo, tiger-cat, great numbers of deer, game of all species, and an immense variety of birds and reptiles. Oxen, buffaloes, horses, and asses are used for domestic service, as in Europe; and goats, sheep, and hogs are reared. Several kinds of artificial grasses are grown, but the culture of products for food, & exportation, is pursued only to a very small extent, Senegal being a trading entrepôt rather than an agricultural colony. Few of the colonists are employed in manufactures, except in the working of iron and ship-building. The making of bricks, lime, and salt employs a few hands: the negroes weave such clothes as they

the destination and value of the principal exports from the Senegal colony in the year 1861:—

| Destination of Exports | | Value |
|------------------------|---------------------|-----------|
| | | Francs |
| Arachide Nuts | To France | 3,341,584 |
| | „ French Colonies | — |
| | „ Foreign Countries | 46,150 |
| | Total | 3,387,734 |
| Hides, Large | To France | 305,412 |
| | „ Foreign Countries | — |
| | Total | 305,412 |
| Cotton Manufactures | To France | — |
| | „ French Colonies | 271,343 |
| | „ Foreign Countries | 688,994 |
| | Total | 960,337 |
| Wax | To France | 187,250 |
| | Total | 187,250 |

Senegal is governed by a superior naval officer, who resides at St. Louis: Goree is the seat of a lieutenant-governor. A court of primary jurisdiction sits at St. Louis, from the decisions of which appeal lies to a court composed of the governor, the other chief functionaries, and certain principal inhabs. of the colony. The European force in Senegal consists of half a battalion of marines, a comp. of marine artillery, and a comp. of sappers, altogether amounting to about 870 men. The French established themselves here in 1687, but no settlement of much importance was made till the formation of the Senegal Company in 1664. The English took Senegal in 1756, but it was retaken by the French in 1779: it was again held by the English from a period shortly after the French Revolution till the peace of 1814.

SENLIS (an. *Augustomagus*, post. *Sylvanectes*), a town of France, dép. Oise, cap. arrond., on the Nonette, a tributary of the Marne, 29 m. SE. by E. Beauvais. Pop. 5,831 in 1861. Senlis stands on the declivity of a hill, and consists of the town proper and three suburbs. The town is surrounded with thick walls, parts of which are supposed to be remains of those constructed by the Romans. It is tolerably well-built; but the streets are mostly narrow and crooked, and it has few public buildings worth notice. The cathedral, however, has a handsome spire, 225 ft. in height. Chicory, starch, and cotton thread are the principal manufactures.

The town was of importance in the middle ages: under the Carlovingians it had the right of coinage, and in 1180 Philip Augustus espoused Elizabeth of Hainault at Senlis.

SENS (an. *Agedincum*, post. *Senones*), a town of France, dep. Yonne, cap. arrond., on the Yonne, 30 m. SE. Auxerre. Pop. 11,098 in 1861. The town is surrounded with decayed walls, attributed to the Romans, and various Roman antiquities exist in and round the town. It has a fine Gothic cathedral, of the same proportions as Notre Dame, in Paris, though of less size. In it is the splendid marble mausoleum of the dauphin, son of Louis XV., and father of Louis XVI., Louis XVIII., and Charles X., a chef-d'œuvre of Coustou. In the chapter-house is a painting of the death of Thomas-à-Becket, who took refuge at Sens about 1166. The communal college is a large building, with a museum of antiques, and a public library of above 6,000 vols. Sens has a seminary, some public baths, a handsome theatre, and a court of primary

and an active trade in agricultural produce, timber, oak, bark, and leather.

Under Valens, Sens was made the cap. of the 4th Lyonnaise, and it became an archbishopric on the establishment of Christianity in the empire. Several councils were held here in the middle ages, including that in 1140, at which Abelard was condemned for heresy.

✓**SERAMPORE**, a town in British India, formerly one of the Danish settlements in Hindostan, prov. Bengal, on the Hooghly, about 12 m. above Calcutta, and immediately opposite Barrackpore. Pop. about 15,000. It extends for 1 m. along the river, and is without fortifications, having only a small battery for saluting. Serampore has long been the head-quarters of the Protestant missions in India, and has a large and handsome college for the instruction of native youths, and an extensive missionary printing establishment. It was here that the Scriptures were translated into various Indian dialects, under the superintendence of Dr. Carey and others. Serampore was ceded by the Danish government to Great Britain in 1846.

SERES, a large town of Turkey in Europe, in Macedonia, cap. of a beylik, on a declivity a little N. of the lake Takinos, and 44 m. NE. Salonika. Pop. estim. at 26,000. Seres is surrounded by a wall flanked with towers, and commanded by a citadel. It is well built, the houses being interspersed with gardens: it has some spacious *khanes*, numerous mosques, churches, and fountains, and several public baths, with linen and cotton manufactures, and an active trade in cotton, grown in large quantities in its vicinity.

SERINGAPATAM (*Sri-Ranga-Patana*, 'Vishnu's city'), a decayed town and fortress of India, S. of the Krishna, which, under Hyder Ali and Tippoo, was the capital of Mysore. It stands at the W. angle of an island in the Caverry, about 4 m. in length by $1\frac{1}{2}$ m. in breadth, and is about 250 m. WSW. Madras. Lat. $12^{\circ} 25' N.$, long. $76^{\circ} 45' E.$ The fortress, constructed by Tippoo, is an immense mass of building, but in several respects injudiciously planned. It was, however, when invested by British troops, strengthened with six redoubts, and other strong outworks. As a capital, the town was but mean. It has one good bazaar, and a broad road under the ramparts, but the other streets have a very indifferent appearance; the houses also are shabby, and the public buildings few. On an eminence in the centre of the island is a large and handsome suburb, in which is the mausoleum of Hyder Ali and Tippoo; and across the Caverry, near the city, is a native bridge of granite, remarkable for its size and solidity.

Seringapatam was besieged by the English on three different occasions: the first two sieges took place in 1791 and 1792; at the latter, Tippoo purchased a peace by ceding half his dominions, and paying 3 crores and 30 lacs of rupees to the British and their allies. Another war, however, broke out in 1799; and on the 4th of May, in the same year, Seringapatam was stormed by the British and the Nizam's forces, under Gen. Harris. On that occasion Tippoo was killed, with the greater part of his garrison, amounting to 8,000 men, and the dominions of the last formidable enemy of the British in the Indian peninsula were added to the Indian empire.

SERVAN (ST.), a town and sea-port of France, dép. Ille-et-Vilaine, on the Rance, immediately behind St. Malo, of which town it may be considered the continental suburb, though comprised in a distinct commune. Pop. 12,709 in 1861. St.

Solidor, an isolated tower about 60 ft. in height. The dockyard, which derives its name from this tower, has five slips, three of which are appropriated to the construction of frigates. The naval establishments at St. Servan are considerable, and there is a floating dock, connecting the port with that of St. Malo. St. Servan has manufactures of sail-cloth, cordage, and ship-biscuit, and is the general entrepôt for the trade of St. Malo. Among its inhabs. are many English families, attracted by the cheapness of living, and the beauty of the neighbourhood.

SERVIA (an. *Mesia-Superior*, with part of *Illyricum*), one of the principalities on the Danube, nominally included in the dom. of Turkey-in-Europe, but in a great measure independent of the Porte. It extends between the 42nd and 45th degs. of N. lat., and the 19th and 23rd of E. long.: having N. the Hungarian provs. of Slavonia and the Banat, from which it is separated by the Save and Danube; E. Wallachia and Bulgaria, from the first of which it is also separated by the Danube; S. Macedonia, the Balkhan being the boundary line in this direction; and W. Bosnia, from which it is divided by the Ibar and the Drin. Greatest length, N. to S., about 180 m.; breadth, varying from 100 to 160 m. Area, 12,600 sq. m.; Pop. 1,098,281 in 1861. The greater part of the country is covered with mountains, those in the W. being ramifications of the Dinaric Alps, and in the S. and E. branches from the Balkhan. There are, however, some tolerably extensive plains, particularly in the N. and along the course of the Morava. This river, which, after those above named, is the principal in Servia, nearly traverses the country from S. to N. The climate is remarkably variable, and much colder in winter than would be inferred from the lat., the Danube and the Save being often thickly frozen over. The heats of summer are proportionally intense: the autumn is the most agreeable season; but ague is very prevalent then and in spring. The soil is almost everywhere fertile, though to a great extent uncultivated. Every species of grain common in Europe is raised, except rice. Maize is the principal; but much more wheat is produced than formerly, and maize bread is not now generally made use of by the inhabs. of Belgrade and other large towns. Owing to the inland situation of the country, and the want of markets, the price of corn is usually very low.

The vine is generally grown; but, from defects of culture, the grapes of the same vineyard usually differ greatly in quality, and being all used promiscuously in the making of wine, it is, for the most part, very different. In the district of Belgrade, however, superior red wine approaching to claret has been made, though to no great extent. In fact, but little wine is drunk in Servia; a spirituous liquor, distilled from plums, called *slivovitz* or *rakia*, sold at about a farthing a quart, being used in its stead. Hemp, flax, tobacco, and cotton are cultivated, but only in small quantities. The pasture-grounds are extensive and good, though little can be said in favour of the breeds of cattle and sheep. Both are meagre and impoverished; and the former, though universally employed, with buffaloes, for draught, are not very numerous. The horses, also, are poor and diminutive. Hogs are by far the most valuable and favourite stock. No peasant's family is without these animals. They overspread the country in vast herds, being branded with the proprietor's name, and turned loose in the forests, where they feed on acorns, except in winter, when they are scantily fed at

220,000 are said to be annually sent to the Austrian dominions, where they pay a considerable import duty, having also paid an export duty on leaving the Servian frontier. The wool of the Servian sheep is very inferior; but about 60,000 lamb and goat skins are annually disposed of to Austrian merchants.

The forests, which overspread a large proportion of the country, might, if they could be turned to good account, be made, under judicious management, an almost inexhaustible source of wealth. Oak, extremely well adapted for ship-building, ash, and pine are the principal trees, and valonea is produced in great plenty. But the forests in many places are so thick as to be all but impassable, and, at the same time, encumbered with putrescent vegetation. The collection of leeches, which abound in the marshy districts, has been carried to some extent of late years. They are disposed of to French merchants settled in Belgrade and Semlin, who forward them to Paris. Iron, copper, lead, quicksilver, and coal are found in Servia; but few mines are wrought.

Until a more extensive commerce take place on the Danube, or a free communication of some kind be established between the Upper Save and the Austrian ports on the Adriatic, the great natural resources of Servia must continue all but unavailable. Her produce being similar to that of the S. provinces of Austria and Russia, these states throw obstacles in the way of her commerce; at the same time that the adjacent Turkish provinces have no need of her staples. The want of good roads is, also, a great drawback on the prosperity of all the provinces in this remote part of Europe: the only high road in Servia is that which leads from Belgrade to Adrianople. Servia, however, is less inconvenienced than most of the contiguous provinces by the want of roads, their deficiency being, in part at least, compensated by the easy access to the great navigable rivers by which she is almost surrounded.

The Servians belong to the widely-spread Slavonian stock, with which most part of E. Europe is peopled. Their language is the most refined of the Southern Slavonian dialects, and their poetry ranks high among that of the E. European nations. In their manners and customs the Servians differ little from the other Slavonic tribes in their vicinity: they are in general almost equally uncivilised, backward in the arts, ignorant, and superstitious; though in some of the larger towns some degree of advance has of late been perceptible.

Servia is divided into 6 provs. and 13 districts; chief towns, Belgrade, the cap., Semendria, Nissa, Jogodina, Kragajewacz, and Poschega. In the middle ages, it formed an indep. kingdom, the dominion of which extended over parts of Bulgaria, Bosnia, and Albania: it was conquered by the Turks in 1365. The Turks still garrison Belgrade, which is the residence of a pacha; but nothing is left them beyond this military occupation, an acknowledgment of the supremacy of the Porte, and a small yearly tribute to the sultan. The internal government is wholly in the hands of the Servians. Early in the present century, a successful revolt took place, headed by Czerny-George, a native chief, who, in 1806, took Belgrade from the Turks, and continued to govern the country till the peace of 1814; when it again submitted to the Turks, and Czerny-George took refuge in Russia. A new revolt, under Milosch Obrenowitsch, in 1815, was equally successful, and Milosch held for a quarter

the state expenses, and various other financial plans, were adopted. But owing, as has been alleged, to Russian influence, Milosch was obliged to resign the government, and retire to his estates in Wallachia in 1839, since which period he has been succeeded by his second son, Prince Michael. By the treaty of Paris, of March 30, 1856, Servia was acknowledged a semi-independent state, and placed under the protection of the three great European powers. Servia has a small standing military force of about 1,750 men, 1,500 infantry, 200 cavalry, and 50 artillerymen; but all males capable of bearing arms are enrolled in the militia, and a force of 40,000 men may be collected on an emergency.

SETUBAL, or ST. UBES, a city and sea-port of Portugal, prov. Estremadura, cap. Comarca, on the N. side of the bay of its own name, which receives the Sadao at its SE. extremity, about 18 m. SE. Lisbon, with which it is connected by railway. Pop. 15,120 in 1858. The city extends for about $\frac{3}{4}$ m. along the beach, consisting mostly of two or three parallel narrow streets, crossed by others, and some squares, in one of which is a handsome public fountain. It is enclosed by walls partly in ruins, and defended by the castle of St. Philip and a few other detached forts. It has several convents and hospitals, Latin schools, and courts of justice, broad quays, and a convenient harbour for merchantmen. Its environs, which are very picturesque and fertile, produce large quantities of muscadel and white wines, which, with oranges, lemons, and salt, are its principal articles of export. The exports of salt from St. Ubes have long been of very considerable importance, and furnish the greater part of the demand of Sweden and various other countries. The pilchard fishery employs a good many hands; and a large fair is held annually from the 25th to the 29th of July. Near it is the famous convent of Arnabida, to which pilgrimages are performed.

The an. *Cetobriga* is supposed to have stood on the opposite shore of the bay, where various remains of antiquity have been found; one of which, a Corinthian pillar, surmounted by a crucifix, stands in the square of the city. After the expulsion of the Moors, Setubal was all but deserted, till it was repeopled under Alonzo Henriquez and his son Sancho. It was fortified during the war of independence in the seventeenth century. It suffered severely from the earthquake so disastrous to Lisbon in 1755.

SEVASTOPOL, or AKTIAR, a fortified town and sea-port of European Russia, on the W. coast of the Crimea; lat. $44^{\circ} 36' N.$, long. $33^{\circ} 30' E.$ Pop. 10,296 in 1858. Sevastopol stands on a creek, on the S. side of one of the finest bays in the world, the *Etenus* of Strabo. It stretches E. into the country about 5 m., with a breadth, where greatest, of about a mile: it has, till within a short distance of the bottom, near Inkerman, from 6 to 11 fathoms water. There are in the cove on which the town is built 5 fathoms water close in shore. The bottom is clay and mud, and it is quite free from rocks and shoals. The bay is defended by strong forts on both sides the entrance. Sevastopol has been for some time the principal station of the Russian fleet in the Black Sea, for which it is incomparably better fitted than either Kherzon or Nicolaeff. Streets wide and regular, intersecting each other at right angles; houses extremely good, and built in the modern Italian style; principal edifices, admiralty, arsenal, hospital, barracks of the garrison, and marine bar-

French-Turkish army, in all respects one of the most extraordinary sieges of modern times. The place was invested on the 28th Sept. 1854, and finally captured by the allied troops on the 9th of September, 1855. The Russians, before quitting the town, sunk the greater portion of their fleet in the harbour.

SEVENOAKS, a market town and par. of Kent, lathe Sutton-at-Hone, hund. Codsheath, on a ridge of hills near the Darent, 21 m. SSE. London, on the South Eastern railway. Pop. of par. 4,695 in 1861. Area of par., with the liberties of Riverhead and Weald, 6,790 acres. The town consists principally of two wide streets, in one of which is the market-house. Many of the houses are large, and inhabited by opulent families. The parish church is spacious and handsome, and is a conspicuous object for several miles round. The livings are a rectory and a vicarage in the gift of the Curteis family. There are meeting-houses for Baptists and Wesleyans, a hospital for aged persons, and a free grammar school, both founded and endowed by Sir W. Sevenoke, in 1418. The latter was further endowed by Queen Elizabeth, whose name it bears; and has an annual income of about 1,000*l.*, with seven exhibitions, five scholarships in any college of either university, and two in Jesus' College, Cambridge. In another school, founded in 1675, about 300 poor children are instructed on the national system.

Near the town is Knowle or Knoll, the magnificent seat of the dukes of Dorset: it has belonged, with little intermission, to the Sackville family, since the time of Queen Elizabeth. It is a large, fine, castellated edifice. The interior, which is nobly furnished, has various pictures by celebrated masters, and other splendid works of art.

Sevenoaks has no manufactures: there were formerly some silk mills in the vicinity, but they no longer exist. The town is governed by a warden, a bailiff, and four assistants, chosen at an annual court leet. Petty sessions are held on the last Saturday in every month, and a court of requests on the first Friday in each month. Sevenoaks is the head of a par. union. Markets on Saturday; fairs, July 10 and Oct. 12, for hogs and poultry; and the 3rd Tuesday in every month for cattle.

SEVERN, a river of England, being inferior only to the Thames in magnitude, and perhaps, also, in importance. It has its source in a small lake on the eastern side of Plinlimmon mountain, in Montgomeryshire. At its outset it is called the Hafren, the name by which, through its whole course, it was known to the Britons. It flows first towards the SE., and afterwards turns to the NE. as it approaches Newton, where it takes the name of Severn. Hence, through the vale of Montgomery, its course is almost due N., till, entering the great plain of Salop, beyond Welshpool, it turns abruptly to the SE.; and pursuing the same direction, it almost encircles Shrewsbury. Flowing through Colebrook Dale, and passing Bridgenorth, it follows a southerly course as it leaves Salop, and enters Worcestershire at Bewdley. Being now become a broad and deep river, crowded with barges, it rolls through a pleasant country in a tranquil stream, passing the city of Worcester, and traversing the vales of Evesham and Gloucester. In the latter it divides into two channels, one of which washes the walls of Gloucester; but, being again united, it forms a great tidal river. Its course from Gloucester to Nass Point is tortuous; from the latter it flows SW., till it assumes the name of the Bristol Channel, expanding and insensibly losing itself in the Atlantic Ocean.

The Severn, particularly below Gloucester, has

much damage to the surrounding country. It is remarkable for its tide, which rushes in with a head 4 or 5 ft. high, and a loud noise. This, no doubt, arises from the wide expanse of the waters of the Atlantic in the Bristol Channel being gradually narrowed, till at length they are forced violently up the river. Outside the Bristol Channel, spring tides rise from 22 to 24 and 26 ft.; but in King's Road, at the mouth of the Lower Avon, they rise to the height of 48 ft., and sometimes more; and at Chepstow the rise is 60 ft. The opposition which the current from the sea meets with from the adverse current of the river occasions that dashing and grinding of the waves known by the name of *hygre* or *eagre*.

The Severn is navigable from Flatholm lighthouse, where it loses itself in the Bristol Channel, to Welshpool, a distance of about 178 m.; and its navigation is continued by the Montgomery canal to Newton. It is, consequently, of the highest importance as a channel of internal communication; its capacity in this respect being materially increased by its numerous large tributary streams, and by the canals and railroads that join it. By means of the latter, it commands a large share of the commerce of Birmingham, and of the various trading towns of Staffordshire and Warwickshire, and is united with the Thames, the Trent, and the Mersey. From Welshpool to the sea it has a gradual fall of 225 ft.

The navigation of the Severn from Nass Point to Gloucester is both tedious and difficult. To obviate this inconvenience, a canal on a large scale has been dug from Berkeley Pill to Gloucester. It is 18½ m. in length, from 70 to 90 ft. in width, and from 15 to 18 ft. in depth; and may consequently be navigated by vessels of 350 tons. There is a basin at each end for the accommodation of shipping. This canal, which was opened in 1827, has become the channel of an extensive commerce; and Gloucester is now rising fast in importance as a trading and shipping town. The barges which navigate the Severn are about 120 ft. in length, from 19 to 20 in breadth, and 5 in depth. They carry above 100 tons. The trows are from 60 to 70 ft. long, 20 broad, and 5 deep, carrying 75 tons. They carry a square sail, and have a mainmast and topmast.

Of the tributaries of the Severn, the most important are the Teme, the Upper and Lower Avon, the Wye, and the Usk.

SEVERNDROOG, or **SAVENDROOG**, a strong hill fortress of Hindostan, in the Mysore territory, 20 m. W. by S. Bangalore. Though it is impossible to invest this place closely, it was, nevertheless, stormed and taken without the loss of a single man, by the British, under Lord Cornwallis, in 1791.

SEVILLE, a celebrated city of Spain, the cap. of Andalusia, and of the prov. of its own name, in a wide and fruitful plain on the Guadalquivir, 62 m. NE. Cadiz, and 212 m. SSW. Madrid, on the railway from Madrid to Cadiz. Pop. 81,546 in 1857. The city has numerous suburbs, but the city proper is about 4 m. in circuit, enclosed by a line of circumvallation 13 m. in circ. The ancient suburb of Triana is on the right bank; but, with this exception, Seville lies wholly on the E. side of the river. The streets, with few exceptions, are narrow and crooked, some of them being so contracted that one may touch both walls at the same time. Few are wide enough for carriages; and many through which coaches pass, show, by the deep furrows in the walls, that one nave touched, and often both at the same time. The street or place, called the Alameda, in the centre

very magnificent; being 600 yards in length, by 150 in width, decorated with 3 fountains, and with statues of Hercules and Julius Cæsar. Seville has all the peculiarities of a Moorish town, and furnishes a good specimen of the architecture of the Moors in their streets and houses, the former of which, narrow, close, and dirty, appear in strange contrast with the extensive and airy mansions that open on them, neatly white-washed, and studded with numerous windows, each having its cool-looking, green Venetian shutters. The *Paseo* and the *Delicias* are the principal public walks, and in point of rural beauty are superior to any in Spain. The former is here what the *Prado* is in Madrid; and in it the pop. may be studied to the best advantage. Among the public buildings are 31 churches, including the cathedral, numerous large edifices formerly conventual, but many of which have lately been turned into manufactories; an exchange, guildhall, 10 hospitals, one of which is military, an asylum for decayed priests, 8 sets of barracks, 7 prisons, and 2 theatres.

The cathedral, built in the 14th and 15th centuries, occupies the site of a Moorish mosque; but it seems highly probable that it was a Christian church prior to the Mohammedan conquest. It has 5 naves, but no dome or central tower. It is 420 ft. in length by 263 ft. in breadth; the height from the floor to the roof being estimated at 126 ft. The only remaining parts of the mosque are the Giralda, or belfry, and the great gate of the cloisters, the latter of which is a fine specimen of the best style of Moorish architecture. The most admired feature in the cathedral is the Giralda (weathercock), a brick tower 258 ft. in height, and exactly square, each side being 50 ft. in breadth. This is surmounted by 4 smaller towers, which are crowned by a small cupola, the whole terminating in the *giraldita*, which gives its name to the tower, a colossal bronze statue of Faith, bearing a flag and palm branch, 14 ft. in height, and of great weight, but so delicately poised as to turn with the slightest variation of the wind. The height from the ground to the top of the statue is said to be 364 Span. feet. The ascent to the top of the great tower is by an inclined plain, so gradual that one may ride up without inconvenience; the view from the summit is superb, extending over the entire plain. In point of riches, this cathedral ranked second only to that of Toledo. It had, also, with the church of the Capuchins, and the chapel of the hospital *de la Curiaul*, some noble pictures by Murillo; but, though some of these have been preserved, others have become, by purchase, the property of private individuals.

Some of the Castilian monarchs are buried within the cathedral; but these tombs excite no emotions compared to those excited by the sight of the slab, in front of the choir, which once covered the remains of COLUMBUS. It is inscribed *A Castilla y Aragon otro Mundo dió Colon*—To Castile and Aragon Colon (Columbus) gave another world. The remains of Columbus, after reposing here for about 30 years, were carried across the Atlantic, and deposited in the cathedral of St. Domingo: but, in 1795, on the capture of St. Domingo by the blacks, the ashes of the illustrious dead were again raised by the whites, and carried to the Havannah, where they are now deposited. It is worthy of notice, that the library belonging to the cathedral was begun in 1560, by the bequest of 20,000 vols. left for the purpose by Hernando, one of Columbus's sons.

The large organ, which is considerably larger

organ, and, at times, the effect is almost too overpowering for human senses.' Immediately under the Giralda, occupying one side of a small square, is the archbishop's palace with a handsome front, and opposite to it is the *Lonja*, or exchange, a quadrangular edifice, with a central *patio*, comprising apartments, some of which are still used by the merchants, though the greater part has been converted into an *Archivio de los papeles de Indias*, or repository for American archives; the voluminous records here preserved being carefully placed and ticketed. The floors are laid in chequered marble, and the grand staircase is of highly polished red marble, and remarkably handsome. A little removed from the Lonja is the Alcazar, a royal palace and gardens, said to have been constructed in imitation of the Alhambra, principally by Peter the Cruel and Charles V. The exterior has a miserable appearance, but the first court, after entering the gate, has a grand effect. It is 93 ft. in length by 69 ft. in breadth, flagged with marble, and surrounded with a colonnade of white marble Corinthian pillars, of handsome proportions and well executed, the walls behind being covered with grotesque designs in the Moorish taste. Next to the Court of Lions, in the Alhambra, this court is perhaps the best piece of Arabic building in Spain for execution and delicacy of design, though the ornaments of the palace in Seville are much inferior to those of that in Granada. The Alcazar comprises a suite of 78 successive apartments, having carved ceilings, with walls, like those of the Alhambra, with well-preserved arabesques. By far the most splendid, however, is the Hall of Ambassadors, a splendid apartment adorned with designs in stucco, and with a floor of variegated marble. Within the Alcazar are many fine paintings, by Murillo, Velasquez, Luis de Vargas, and other Spanish masters, with a few specimens of the Italian school; but several of the best pictures have, within the last few years, been removed to the public gallery at Madrid. A considerable portion of the palace is now let out in lodging-houses and to private individuals, the portion reserved for the sovereign comprising only a small section of the entire pile. The gardens, which are of small extent, are laid out according to the Moorish taste, in formal alleys with chipped myrtle hedges and trees, cut to resemble warriors armed with clubs. The walks in some parts are laid with tiles, through which *jets-d'eau* are made to flow, which, by turning a screw, suddenly water not only the garden, but its unwary visitors. The *Casa Pilata* another of the sights of Seville, is a private house, said to have been built on the exact model of that of the Roman governor of Jerusalem. Within the city, also, are many structures of Roman origin, which still show traces of their former magnificence. The octagon tower, or *Torre d'Oro*, was probably built by one of the Cæsars. The *Caños de Carmona*, a Roman aqueduct of 410 arches, still conveys water to the city from Alcalá; and the gates, especially that of Triana, are very magnificent, though of equally ancient origin.

Most of the other objects worth notice are without the walls. The first in order is the *Plaza de los Toros*, or circus for bull-fights, half wood and half stone, and capable of accommodating 14,000 spectators. The next remarkable object is the royal tobacco manufactory, a huge edifice 440 ft. in length by 280 ft. in breadth, so strongly built and guarded by walls and ditches, as to appear like a fort or citadel raised to overawe the

national institution, though not at present in any great activity. Among the other public establishments may be specified the cavalry barracks, royal saltpetre manufactory, and military hospital. The market-place is large, and admirably suited to its purpose, the buildings being arranged in streets, an open space surrounding the whole, with gates and ornamental fountains. In the suburb of Triana is a separate market for the supply of the *gitanos*, or gypsies, its chief inhabitants.

The arrangement of the streets is very different from that observable in most other Spanish towns, and is mainly the effect of the hot climate. To a similar cause may be traced the internal arrangement of the houses. They are built almost universally in the form of a square, with a spacious court-yard, or patio, frequently paved with marble, and surrounded by piazzas opening on the apartments of the ground-floor; the exterior as well as every other part of the house being kept carefully whitewashed, the massive green wooden blinds of the windows being kept closely shut during the day. In addition to this, the rooms, which are usually paved with tiles, are furnished with ponderous window shutters half a foot thick, kept shut till the sun is off the windows, when they are partially opened to admit the breeze. Hence the houses are so dark, that visitors at first with difficulty distinguish the inmates. The climate may also be said to divide the houses into two distinct parts. During the winter months (commencing in Oct. and ending with April) the family inhabit the upper parts of the house, which are then thickly matted, and the rooms artificially heated by brasiers of charcoal; but when the hot weather sets in, these apartments are shut up, and a general move is made to the ground-floor, which, being considerably cooler, and opening on the patio, renders the heat more endurable. 'It is a pretty sight, indeed,' says Sir A. C. Brooke (*Travels in Spain and Morocco*, i. 45), 'to saunter during the delicious moonlight evenings of summer along the fashionable streets of the city; and nothing can be more strikingly brilliant than the appearance of the houses and hotels of the nobility and wealthier classes. On looking through the trellised iron door opening to the street, you perceive the entire patio brilliantly illuminated, well furnished, and with pictures suspended from the marble columns of the arches. An awning forms a sufficient roofing by night as well as by day, and converts the space below into a spacious and lofty saloon, in the centre of which different *jets-d'eau* spout forth from a marble fountain, both cooling the air and watering a variety of sweet, odoriferous plants, scattered around in flower-pots. Here the young ladies of the family may be seen enjoying the coolness of the evening, engaged in work, amusing themselves with music and singing, and receiving the visits of their friends.' These summer habits are truly Moorish; and even in trifles glimpses of them become easily visible, as, for instance, in the contempt of chairs, for which mats and low stools are pretty generally substituted by all classes.

The aspect of the pop. of Seville differs greatly from that of Madrid. Even in the upper ranks, there is something in the ladies of an eastern appearance: they are more frequently veiled, their cheeks seem tinged with a hue of Moorish blood, and, along with the fire of a Castilian eye, there is mingled a shade of Oriental softness. Among the lower orders of the women, also, as among the Moors, may be remarked an extravagant and tasteless profusion of gaudy ornaments, immense ear-rings and bracelets, and numerous rings. The dress of the Andalusian peasant is even more

grotesque and ornamented than that of the women, his jacket and waistcoat being almost always trimmed with gold or silver, and every article of his dress covered with silk cords and buttons. Another striking difference between Madrid and Seville is in the great mass of ragged, wretched-looking people in the latter, in consequence mainly of the heat of the climate, which renders labour a disagreeable exertion, especially in a country where subsistence is so easily procured. Let a small loaf of bread be given to one of these sons of idleness, he makes a hole in it, begs a little oil, not worth refusing, which he pours in, and soaking his bread as he eats it, he is set up for the day; and if he succeed in getting a two-quarter piece, he may procure as many grapes as his heart can desire. What incitement has such a one to be busy? The upper and middle ranks of Seville live more luxuriantly, but not better than those of Madrid; for the luxuries of the former, their iced waters, lemonade, and pomegranates, their cool patios, fountains, and baths, are necessary to health and comfort. But even in his ordinary diet, the Andalusian has the advantage over the Castilian; for though it be true that, like the inhabitants of the northern provinces, he dines on the eternal *puchero*, its ingredients are better in Andalusia than in Castile, the pigs being fed on the ilex-nuts, and the vegetables of S. Spain being perhaps the finest in the world. The difference between Andalusia and Castile is still further observable from the state of society in the two provinces. The tertulia of Seville is quite different from that of Madrid, the former being at any rate more animated, if not more intellectual, and the dullness helped out with cards, dancing, forfeits, and other amusements, independent of mere chit-chat and *persiflage*. Balls and suppers are reserved for great occasions; but substantial entertainments are more general than in the capital, perhaps because wealth is more generally diffused. Morals are at a very low ebb.

The feast, the song, the revel here abounds;
Strange modes of merriment the hours consume,
Nor bleed these patriots with their country's wounds,
Nor here War's clarion, but Love's rebeck sounds;
Here Folly still his votaries intralls;
And young-eyed Lewdness walks her midnight rounds:

Girt with the silent crimes of capitals,
Still to the last kind Vice clings to the tottering walls.
Childe Harold, I. st. 46.

In Seville it is almost a derision to a married woman to have no *cortejo*, and a jest against a *señorita* not to have her *amante*. But with all this corruption, the course of society runs smooth; jealousy appears not to disturb the *ménage*, the parties living together with all the outward show of mutual esteem, and inflicting the history of their private bickerings only on their most intimate friends. The amusements of the middle and higher classes consist of the daily promenading on the *Paseo* or *Alameda* (the Hyde Park or Regent Street of London); theatrical entertainments, of which they are passionately fond, and no mean judges; and the tertulia, which are so arranged as to succeed each other in the arrangements of the day. The lower classes are fond of dancing; but of music they have little knowledge, for nothing can well be more disagreeable than their crazy guitars.

Seville, as a place of residence for a stranger who cares only for sensual gratifications, is perhaps preferable to any other Spanish city. It is said that there is not a day throughout the year in which the sun does not shine on Seville. Winter is scarcely felt; and if the heats of summer be oppressive, as they truly are during the

prevalence of the *solano*, the streets, houses, and economy of life are admirably adapted to lessen their influence. The surrounding country, with its orange and lemon groves, acacias, and other flowering trees and shrubs, is all that one can desire: fruits of many varieties and choice flavour may be had almost for nothing, and every necessary of life may be procured in abundance, and at very moderate rates. Game, fruit, and vegetables are excellent; and the bread (brought to market from the neighbouring village of *Alcala dos Panadores*) is said to be the best in Spain. Meat is reasonable, but of rather indifferent quality.

Seville has several establishments for the promotion of learning, science, and general education; but of these few, if any, can be considered as very efficient. Its university, founded in 1502, is in the most backward state possible. The other scholastic establishments comprise a school of medicine, two mathematical schools, a college of agriculture, and an academy of the fine arts, besides the ancient, though decaying, school of St. Elmo for navigation and gunnery. Seville has also several societies for the promotion of different branches of literature and science; but they exercise little influence, owing to the general want of sound elementary education.

In the 17th century the silk manufacture attained to considerable importance in Seville, there being, in 1650, about 3,000 looms engaged in the business. The manufacture has since undergone many vicissitudes; but in the earlier part of the present century it employed about 2,400 looms. Owing, however, to the loss of the colonial markets, and still more to the harassed state of the country for many years back, the number of looms is at present reduced to from 500 to 600. Coarse woollen cloths are made in considerable quantities, but they are both inferior to, and much dearer than, similar English fabrics. There are several large tanneries, manufactories of hats, combs, and earthenware; but, as in the rest of Spain, the processes are so clumsy, that, speaking generally, all manufactured articles are of inferior quality. The tobacco manufactory, iron foundry, and saltpetre establishment, have been already mentioned as government monopolies. The trade of Seville rose to considerable importance after the discovery of America, in consequence of its being vested with the monopoly of the commerce between Spain and the New World. This advantage, however, was soon lost, from the difficulty of navigating the Guadalquivir with large vessels; and the trade was transferred to Cadiz. The river, at certain times of the year, is accessible as far as Seville for ships of 100 tons; but, generally speaking, all vessels drawing more than 10 ft. water are obliged to load and unload 8 m. below the city. Some efforts, however, have lately been made for the improvement of the navigation. The exports comprise wool, goat-leather, oil, silk, and fruit, particularly oranges. The trade in oranges is carried on principally with England, to which about 40 cargoes are sent every year, comprising about 16,000 chests, 1-10th of which are bitter, and the rest sweet oranges: the chief part of the export takes place in Nov. and Dec. The imports comprise various manufactures from England; hides, hemp, and flax, from the Baltic; iron from Bilbao, and colonial produce from Cuba and Porto Rico. A considerable coasting trade is carried on with Cadiz, Malaga, Barcelona, and other ports of Spain; and there is daily steam communication with St. Lucar and Cadiz.

Seville stands on the site of the *Hispalis* of the Romans. It opened its gates to the Moors in 711,

in their possession above five centuries, being the seat first of a regal, afterwards of an aristocratical government. It was taken by the Christians in 1247, after one of the most obstinate sieges mentioned in Spanish history; but since then it has seldom been the scene of military exploits. It is known in diplomatic history by a treaty concluded in it in 1729, by Spain, England, France, and Holland. In the autumn of 1800, it was visited by the pestilential fever which caused such mortality at Cadiz, and it is said that between the 12th Aug. and 1st Nov. of that year it lost nearly a fourth part of its inhab., half the sufferers being *Gitanos* or gypsies, inhabiting the suburb of Triana. On the invasion of Spain by Napoleon, in 1808, Seville asserted the national independence, and received the junta when driven from Madrid. It however surrendered to the French on the 1st February, 1810, and remained in their hands till the 27th August, 1812, when they left it, in consequence of their defeat at Salamanca.

Seville has given birth to several distinguished individuals, among whom have been included in antiquity the emperors Adrian, Trajan, and Theodosius. There can, however, be little or no doubt that these illustrious individuals were all natives of Italica, a Roman city, a few miles NE. from Hispalis. Among the more remarkable individuals of whom Seville has to boast in modern times may be specified Las Casas, bishop of Chiapa, the defender of the Indians; Antonio de Ulloa, the traveller and economist; and Lopez de Rueda, the father of Spanish comedy. The famous navigator, Magellan, or Magelhaens, sailed from Seville on the 20th Sept., 1519, on the expedition in which he discovered the straits that bear his name.

SEVRES, a small town of France, *dép.* Seine-et-Oise, on the Seine, about midway between Paris and Versailles, being ■ m. NW. the latter city. Pop. 6,328 in 1861. The town has been long famous for its manufactures of porcelain, or *Secres china*, which for elegance of design and excellence of quality is equal, if not superior, to any made in Europe. A large museum is established here, in which are collected specimens of most kinds of earthenware manufactured in France and other countries; the quarries whence the clay used in the manufacture of the porcelain has been obtained form extensive vaults. The Seine is crossed here by a handsome stone bridge.

SEVRES (DEUX), a *dép.* of France, reg. W. principally between the 46th and 47th degs. N. lat., and 0° and 1° W. long.; having N. Maine-et-Loire, E. Vienne, S. Charante and Charante Inférieure, and W. Vendée. Area, 599,988 hectares. Pop. 328,817 in 1861. A hill chain, running from SE. to NW., divides the *dép.* into two portions, very unlike each other in their general aspect, the southern being nearly flat, and the northern very much diversified. Principal rivers, the two Seves (or *Niortaise* and *Nantaise*), whence the name of the *dép.*: one discharges itself into the Atlantic in Vendée, the latter falling into the Loire. A large proportion of the soil is stony, but there are some rich tracts. The arable lands are estimated at 404,355 hectares; meadows, 74,953 do.; vineyards, 20,893 do.; orchards, &c., 9,675 do.; and woods, 36,090 do. Shallow lakes occupy at least 10,000 hectares. Agriculture is generally very backward, being, in most parts, distinguished by an obstinate attachment to old methods; but more corn is raised than is required for home consumption. Flax, hemp, various fruits, and about 350,000 hectol. of wine, are annually produced. The quality of the latter is, with few exceptions, very inferior, and about half the produce is made

mated at 400,000 kilog. Fat cattle, hogs, poultry, timber, brandy, and vinegar are the principal exports of the *dép.* Minerals unimportant. The manufacturing industry of the *dép.* is of little consequence. It is divided into four arronds.: chief towns, Niort (the cap.), Pressuire, Melle, and Parthenay.

SHAFTESBURY, a parl. and mun. bor. and market town of England, co. Dorset, partly in Sixpenny Handley hund., and partly in Alcester liberty, on the border of Wilts, 22½ m. NE. Dorchester, 95 m. SW. London by road, and 105 m. by London and South Western railway. Pop. of munic. bor. 2,497, and of parl. bor. 8,983 in 1861. Previously to the Reform Act, the mun. and parl. boundaries of the bor., which were co-extensive, comprised only portions of the parishes of the Holy Trinity, St. Peter, and St. James. But since then the municipal limits have been enlarged, so as to include the whole of those parishes, with that part of Motcomb in which Fennmore Green and Long Cross are situated; and the parl. boundary comprises the entire parishes of Cann, St. Rumbald, Melbury and Compton Abbas, Stower Provost, East Stower, Todbere, St. Margaret's Marsh, Motcomb, Donhead (in Wilts), and the chapelry of Hartgrove, making a total area of 20,910 acres. The town is situated on the top, and extends nearly to the verge of a high narrow hill. Though irregular, it is well built, a large proportion of the houses being constructed of freestone quarried in the neighbourhood. Shaftesbury had anciently twelve churches, besides several chantries, a celebrated monastery, and a hospital. It has now but three churches, the principal of which, St. Peter's, is of great antiquity, and has some elegance, though much disfigured by modern alterations. In the spacious and well-planted churchyard of Holy Trinity is inclosed a considerable portion of the wall of Shaftesbury Abbey, being all that remains of that once famous edifice. It is said to have been erected by the wife of Edmund, great grandson of king Alfred, for Benedictine nuns. (Camden, Gibson's ed. i. 60.) It was afterwards called St. Edward's Abbey, from Edward the Martyr, who was murdered at Corfe Castle, having been buried in it. After the churches, the principal public buildings comprise a handsome town hall, built at an expense of 3,000*l.*, and meeting-houses for Friends, Independents, Wesleyans, and also Dissenters. A free school, for twenty poor boys, was founded in 1719; and there are almshouses for both men and women. The town had formerly a manufacture of shirt buttons, which employed many women and children; but it has now ceased, and it has few outward signs of prosperity, though it is said that its condition has latterly improved.

Shaftesbury is mentioned as a bor. in Domesday Book; but its only existing municipal charter is that of James I., confirmed by Charles II. It sent two mems. to the H. of C. from the reign of Edward I. down to the passing of the Reform Act, which deprived it of one of its members, and at the same time increased its boundaries as already stated. The election for mems. was formerly vested in the inhabs. paying scot and lot. Reg. electors, 488 in 1865. Since the Municipal Reform Act it has been governed by a mayor, three other aldermen, and twelve councillors. No courts are held within the bor. Market-day, Saturday; fairs, Palm Saturday, June 24, Nov. 23, for all kinds of cattle.

Shaftesbury is supposed to be on, or near the site of an ancient British town called *Cæorsepton*; but it was of little importance till the foundation of its monastery, and has latterly depended prin-

cipally on its political privileges. It gives the title of earl to the noble family of Ashley Cooper.

SHAHABAD, a district of British India, presid. Bengal, prov. Bahar, between the districts of Patna, Bahar, and Ramghur, on the E. and S., and Benares, Ghazepoor, and Sarun, on the W. and N. Area, 4,650 sq. m. Pop. estimated at about 1,000,000, nearly all Hindoos. The Ganges bounds it N., the Sone W., and the Caramnassa E. It is very fertile, its staples being opium, tobacco, cotton, sugar, indigo, and hemp; it is celebrated for the excellence of its roads, a distinction mainly owing to a reservation in the original land settlement with the zemindars of a certain annual sum to keep them in repair.

SHAHJEHANPOOR, a district of British India, prov. Delhi, having NE. Nepaul, E. Oude, S. the latter and the district of Furruckabad, and W. Saiswan, Bareilly, and Pillibhet. Area, 1,420 sq. m. Its cap. town of the same name, 175 m. SE. Delhi, is reported to be nearly as populous as the latter city.

SHANGHAE, a city and river port of China, prov. Kiang-su, on the Woosung river, 40 m. by water from the sea, and 160 m. ESE. Nankin; lat. 31° 12' N., long. 120° 50' E. Pop. 146,227 Chinese, and 3,248 foreigners, according to a census made in the year 1865. The city stands in a level and well cultivated plain, producing good crops of cotton, rice, and wheat. Immediately outside the wall by which it is enclosed are several populous suburbs. Streets narrow and filthy. Foundling hospitals, tea-gardens, and vast ice-houses, are the objects most worthy of notice in the city. It has a mint, with manufactures of silk, vegetable oils and oil cake (of which vast quantities are annually sent into the interior), iron ware, glass, paper, and ivory ware.

Shanghai is the most northerly of the 5 Chinese ports opened to foreigners by the treaty of 1842, and, excepting Canton, it is, also, the most important. The river, which may be navigated by ships of 450 or 500 tons for a considerable distance above the town, crosses the Grand Canal, so that Shanghai is an entrepôt for all the vast and fertile countries traversed by the canal, and by the great rivers, inc. the Yang-tse-Kiang, and the Hoang-Ho, with which it is connected, hence the present importance of this emporium, and hence, also, the indefinite extension to which its foreign trade will probably attain. Its inland and coasting trades are both very extensive. It is annually visited by from 5,000 to 6,000 canal and river boats, some from very great distances, and by 1,500 or 1,600 coasting junks. The prov. of Kiang-su, in which Shanghai is situated, produces great quantities of silk; and besides supplying most part of the N. provs. of the empire, the shipments of silk to the foreigner are greater from this than from any other port. It is also well situated for the export of both green and black teas. Among the other exports are gold and silver, with oil and oil-cake, camphor, drugs, porcelain, cotton, cassia, alum, gypsum, and coal. Of the imports opium is by far the greatest; and at least 20,000 chests of Bombay (Malwa) and Patna opium are annually disposed of in this market; which, supposing the chest to be worth 500 dolls., will represent an aggregate sum of 10,000,000 dolls., or 2,200,000*l.* sterling for which payment is almost invariably made in the precious metals. Sugar is extensively imported from Formosa, Canton, and the Philippines; cotton stuffs, woollens, and iron, from England; with sandal wood, birds' nests, *biche de mer*, and other products of the Eastern Archipelago.

The inhabs. of Shanghai are much more hospitable and better disposed towards foreigners than those of Canton; and strangers may travel for

miles into the interior, all round the city, with perfect security. Within the last 10 years, many fine brick houses have been built by the British and other foreign merchants in the suburbs.

SHANNON, a river of Ireland, being by far the largest and most important in that island, and hardly indeed inferior, if it be not superior, to any in the United Kingdom. It has, in many respects, particularly in its nearly insulating an extensive prov., in the direction of its course, the length of its navigation, and the magnitude of its estuary, a striking resemblance to the Severn. Its source is generally traced to the base of Cuilcagh Mountain, in the NW. part of Cavan. After running a few miles, it falls into Lough Allen, about 10 m. in length, and from 4 m. to 5 m. broad: its course thence to Limerick being S., with a small inclination to the W.: issuing from Lough Allen it passes Leitrim, Carrick, and Tarmonbury, entering Lough Ree, at Lanesborough. This, which is a very irregularly-shaped extensive sheet of water, is about 17 m. in length. Leaving it, the river, now greatly augmented, passes Athlone, and then winds by Shannon Bridge and Banagher to Portumna, near which it expands into Lough Derg, a narrow lake, 23 m. in length, with deep bays and inlets. Escaping from the S. extremity of this lake, it flows on to Limerick. Here, having met the tide, it takes a WSW. direction; and, gradually expanding into a noble estuary, unites with the Atlantic, between Kerry Head and Loop Head, about 70 m. lower down. From the head of Lough Allen to its mouth, the Shannon has a course of about 214 m., viz. Lough Allen, 10 m.; Lough Allen to Lough Ree, 43 m.; Lough Ree, 17 m.; Lough Ree to Lough Derg, 36 m.; Lough Derg, 23 m.; Lough Derg, to Limerick, 15 m.; and thence to the river's mouth, 70 m. Loop Head and Kerry Head are about 8 m. apart.

The distance to which it has been rendered navigable is the most extraordinary circumstance connected with the Shannon. In this respect, indeed, it is superior to the Thames, Severn, Trent, or any English river. If Lough Allen be (as it is considered by some) reckoned its source, it is navigable to its very head; but, tracing its origin to the base of Cuilcagh Mountain, there are only 8 or 7 out of its entire course of about 220 m. that may not be navigated. It is unnecessary to insist on the value of a river of this sort flowing through the very centre of Ireland, insulating the great province of Connaught, and 'washing the shores' of 10 out of the 32 cos. which the island occupies. Unluckily, however, the navigation of the Shannon, like that of most other rivers not of very great depth, is, in certain places and at certain seasons, a good deal obstructed. It may be navigated, with no very serious difficulty, from the sea to Limerick by ships of 400 tons burden. But immediately above the city, and in some other places, its course is impeded by rocks and rapids, and large sums have been expended in improving those parts of the navigation, partly by making lateral cuts, and partly by deepening the bed of the river. The level of Lough Allen is about 144 ft. above high-water mark at Limerick, the ascent being in a great measure overcome by one double lock and twenty single locks, placed in those situations where lateral cuts have been made to avoid the rapids. These cuts are from 13 to 14 ft. wide at bottom, having the usual slopes, and are calculated for a depth of water varying from 4 to 7 ft. in ordinary seasons. Still it must be admitted that, considering its paramount importance, the navigation of the Shannon is by no means in a satisfactory

on which there are sometimes only from 2 to 3 ft. water; and during floods the channel of the river, owing to its frequently expanding into extensive lakes, and the lowness of its banks, is not easily discovered. Had it been an English river, these difficulties would have been overcome long ago; and the money expended upon it might, had it been properly and effectually applied, have sufficed to obviate them. But the works have not unfrequently been very unskilfully and insufficiently executed. It is now, however, under much better management; but it will require a considerable additional expenditure to put the works into proper order, and to ensure at all times, what is so very essential, a safe and easy navigation. The introduction of steam tugs and steam vessels on the loughs of the Shannon has been of infinite service; without them, indeed, it never could have been turned to much account.

The Suck, the principal tributary of the Shannon, rises in Roscommon. Its course is S., inclining to the E., dividing the cos. of Roscommon and Galway, by Castlereagh, Athleague, and Ballinastor, till it unites with the Shannon at Shannon Bridge. On its E. side the Shannon receives the Inny, the Upper and Lower Brosna, Mulkerna, Maig, and Fergus. The last two are navigable to a considerable distance. The importance of the Shannon, as a commercial river, has been materially increased by its junction with the Grand and Royal Canals from Dublin. Though defective both in their plan and execution, and made at an immense expense, still it is not to be denied that they are, particularly the Grand Canal, of great public utility. In connection with the Shannon, they have opened a communication by water across the island, so that persons living in its centre may send their produce, at a moderate expense, to Dublin or Limerick, as they find most advantageous. This laying open of new and almost boundless markets has given a stimulus to the improvement of the central parts of Ireland, of which it is not easy to overrate the influence, and which will, no doubt, be as permanent as it is powerful. From its situation at the head of the estuary of the Shannon, in a country naturally of the most exuberant fertility, 70 m. from the sea, Limerick is the principal emporium of the W. of Ireland.

SHEERNESS, a sea-port and market town of England, in the par. of Minster, lathe S. Cray, co. Kent, on a low tongue of land at the NW. extremity of the Isle of Sheppy, at the confluence of the Thames and Medway, on the E. bank of the latter, 18½ m. WNW. Canterbury, 36½ m. E. by S. London by road, and 49 m. by London, Chatham and Dover railway. Pop. 12,015 in 1861. The town, which owes its rise to the formation of the naval dockyard, is divided into three parts, called respectively, Sheerness-proper, Blue-town and Mile-town, the first two being enclosed by fortifications. During the last few years the town has been much enlarged, as well as greatly improved, by the erection of good brick houses and the formation of several new streets, well paved and lighted with gas. The town was formerly very ill supplied with water; but, at the beginning of the present century, a well was sunk by the board of ordnance to the depth of 360 ft., which supplies water, not only to the town and garrison, but to the shipping in the Medway. A pier with a causeway runs down from the town to low water-mark, and facing both the river and sea is a wharf of considerable extent. Several old ships of war, also, have been stationed on the shore as breakwaters; formerly they used to serve as dwellings for many of the poorer townspeople, but

is at Minister, but a handsome district church has been erected in the Gothic style; and attached to the garrison is a chapel, the appointment to which is with the board of admiralty. The Baptists, Independents, Wesleyan Methodists, Unitarians, and R. Catholics have their respective places of worship, and there is a Jews' synagogue. Sunday schools are attached to the town church, and to several of the chapels: an infant-school is attended by about 200 children, and there is a small endowed charity school. The trade of Sheerness arises chiefly from the dockyard and other government establishments, though considerable shipments are made to London of corn and seeds produced on the island, and of oysters from the adjoining oyster-beds. Pyrites are collected from the crumbling cliffs for the copperas works in the neighbourhood; and many of the inhabs. make a living by picking up or dredging for *septaria* (an oxide of iron), used in making Roman cement. Sheerness has also become, to a certain extent, a resort of sea-bathers, for whose accommodation there are reading-rooms, baths, and bathing-machines. Steamers run daily to and from London during summer, besides passage boats to and from Chatham, which is about 11 m. up the Medway. Markets on Saturday.

The dockyard, which covers an area of about 50 acres, enclosed by a substantial brick wall, has been greatly extended and improved during the last 50 years, at an expense of above 1,000,000*l.* sterling. It has every convenience for the building, repair, and fitting out of ships. It comprises a wet dock or basin of about $3\frac{1}{2}$ acres, capable of accommodating 10 sail of the line, and in which they may take on board their stores, ammunition, and provisions, and be, in all respects, equipped ready for sea. Three dry docks, each suitable for the accommodation of a line-of-battle ship, have been constructed on the E. side of the basin, and open into it. It has also very extensive store-houses, with mast-houses, mast ponds, and slip, smithery, and artificers' workshops of every description; with handsome residences for the commissioners, port-admiral, and other officers of the establishment. The principal offices of the ordnance department were, some years since, removed to Chatham, and the area formerly occupied by them has been added to the dockyard. The wharf wall, on the S. side of the basin in front of the mast-house, is 100, and that on the river front 60 ft. in width, lined on both sides with granite. Numerous convicts are employed in the dockyard and on the hulks, chiefly in the improvement and repairs of the former.

Sheerness, which so late as the time of the Commonwealth was a mere swamp, was fixed upon after the Restoration as an important position for a fortress. The works, however, were still incomplete when the Dutch, under De Ruyter, in 1667, took and destroyed the fortress and the shipping. (See CHATHAM.) The fortifications were afterwards constructed on a larger scale; numerous batteries of heavy artillery were planted on both banks of the river. The dockyard was begun early in the last century. The mutiny of the fleet at the Nore, in 1798, threatened the town and dockyard with destruction, which, however, was happily averted.

SHEFFIELD, a parl. bor., market town, and par. of England, cap. of the district of Hallamshire, W. riding, co. York, upper div. of wap. Strafforth and Tickhill, at the confluence of the Don and Sheaf, the former of which is crossed by 3 and the latter by 2 bridges, 39 m. S. Leeds, 140 m. N. by W. London by road, and 160 m. by Great Northern railway. Pop. of bor. 185,172 in 1861.

Area of parl. bor. and par. which are co-extensive, 22,830 acres. The town, originally confined to the slope of a hill rising SE. from the Don, occupies the bottom and sides of several low hills, rising in various directions both from the Don and Sheaf, the whole being well-paved and flagged, lighted with gas, and abundantly supplied with water. The older streets are steep, narrow, and irregular; but the more modern streets are wide and straight, lined with good brick houses, and many of the shops are but little inferior to those of the metropolis. The smoke, however, proceeding from the numerous steam-engines, forges, and factories, gives the town a dingy, mean appearance, contrasting strangely with the extreme beauty of the surrounding country, embellished as it is, in every direction, by the numerous villas of the opulent bankers, merchants, and manufacturers of Sheffield. The market-place occupies a wide open space in the High Street, and near it are the parish church and principal inns: it is of modern construction, and comprises large shambles and other accommodations. The corn-exchange, also, is a handsome modern building, comprising excellent accommodation for those frequenting the markets. The cutlers' hall in Church Street, belonging to the ancient corporation of cutlers, is a handsome stone building, with rooms for the transacting of corporate business, public meetings, and dinners. The town has 25 churches, most of them of modern erection. The mother church of the Holy Trinity is a noble Gothic structure, 240 ft. in length by 130 ft. in breadth, and from its centre rises a tower surmounted by a lofty spire, of handsome proportions: the part now used for divine service, which excludes the ancient chancel, was rebuilt in 1800, and is fitted up in a solid and handsome manner, with accommodation for upwards of 2,000 persons: in the chancel are some curious old monuments, and a fine bust of a late vicar by Chantrey. St. Paul's, in Norfolk Street (erected by subscription in 1720), is a rather heavy Greek structure, with a tower surmounted by a dome, and a cupola of cast-iron. St. James's, near the par. church, also of Grecian architecture, though small, is well arranged, and at the E. end is a fine stained glass window, representing the crucifixion. St. George's on an eminence, at the W. extremity of the town, erected in 1824, at an expense of 15,130*l.*, chiefly defrayed by the parl. commissioners, is in the later English style, and has a lofty square embattled tower, crowned with pinnacles. St. Philip's, near the infirmary, and St. Mary's on the SE. side of the town, are in a similar style and equally handsome, both having been erected, like St. George's, at the expense of the parl. commissioners. Besides the churches, which have accommodation for upwards of 50,000 persons, there are nearly 40 places of worship for different denominations of dissenters. Nine of these belong to the Wesleyan Methodists, and are among the largest buildings of the town: the Independents have also a number of large places of worship, and there is a handsome Roman Catholic chapel. Connected with the various places of worship are numerous Sunday schools, furnishing religious instruction to about 20,000 children. There are, also, numerous national schools, Lancastrian schools, and infant schools. A grammar school, founded in the reign of James I., has an endowment of about 140*l.* a year, three-fifths of which are paid to the head-master and two-fifths to the usher, both of whom receive entrance-fees, and other extra-payments from the pupils. The management of the school, and the appointment of the masters, is vested in the vicar and 12 bur-

gesses of Sheffield. A school of design, under the patronage of government, has also been established. A charity school, established in 1796, provides clothing, board, and instruction, with an apprentice fee for 90 boys, and a similar establishment for 70 girls was formed in 1786. A collegiate school, founded on a joint-stock principle, is well attended; and the Wesleyan body have established a proprietary school, in which 300 boys are boarded and liberally educated, partly with the view of providing for the better elementary instruction of the intended ministers of that denomination. Among the many charities belonging to the par. of Sheffield, the principal is Lord Shrewsbury's Hospital, for 20 men and the same number of women: the buildings, which have been erected on a new site, consist of a centre and wings, in the later English style. Hollis's Hospital, a similar establishment founded in 1703, is endowed with funds for the support of 16 widows of cutlers, and a small charity-school. There are numerous minor charities.

The general infirmary, which stands about $\frac{1}{4}$ m. N. from the town, is a handsome stone building, with semicircular wings and a central portico, its interior comprising many large and airy wards, with accommodation for about 200 in-patients. Adjoining, but distinct from, the infirmary is a large building, containing fever wards. The medical and domestic arrangements are complete, and, on the whole, it is one of the best regulated provincial hospitals in the kingdom. It was opened in 1797, having cost above 20,000*l.*, raised by subscription. Sheffield has, also, a general dispensary, with lying-in-charities, Dorcas societies, provident institutions, a large auxiliary Bible society, and various religious associations connected both with the established church and the several bodies of dissenters. A theatre was built in 1762, with attached assembly-rooms. The library attached to the mechanics' institute contains about 5,000 vols.: the literary and philosophical society (established in 1822) has a good collection of minerals, fossils, and plants, with apparatus for experiments; and the botanical society has a garden comprising 18 acres, tastefully laid out, and a glass conservatory, 300 ft. in length, filled with rare exotic plants. The chief commercial buildings are the post-office, excise-office, and assay-office, erected in 1773, soon after the rise of the silver-plating trade.

Little is known of the early history of Sheffield, or of the origin of that business for which it is now so famous. But it had attained to eminence in the making of knives so early as the 13th century; for Chaucer, contemporary with Edward III., mentions in his 'Reve's Tale,' the Sheffield 'thwytel,' or whittle, in such a way as shows it was then in common use. It does not appear ever to have lost the reputation for cutlery it had thus early acquired. In 1575 the Earl of Shrewsbury, lord of the manor of Sheffield, sent to his friend Lord Burleigh 'a case of Hallamshire whittels, beinge such fruites as his pore cuntrey. affordeth *with fame throughout the realme.*' In 1624, a corporation was formed for the 'good order and government of the makers of knives, scissors, shears, sickles, and other cutlery-wares in Hallamshire,' the government being vested in a master, two wardens, six searchers, and twenty-four assistants, consisting of freemen only. The principal object in the formation of this corporation seems to have been the regulation of the marks or other devices which every individual was to strike or impress on the goods he made for sale. But these regulations can hardly be said to be any longer in operation. The corporation continued on the

footing fixed in 1624 till 1814, when an act was passed, permitting all persons indiscriminately, without their being freemen, or having served an apprenticeship, or obtained a mark from the corporation for their goods, to carry on business anywhere within the district of Hallamshire. This liberal and judicious measure has been of great service to the town, by inducing men of talent and enterprise, from all parts of the country, to settle in it, where their competition and industry have had the best effects.

For several centuries the manufactures of Sheffield were confined almost entirely to the making of sheath-knives, scissors, sickles, and scythes. About the beginning of the 17th century, a common tobacco-box and the Jew's harp were added to the list of manufactured articles; but it was not till about forty years after that the manufacture of clasp-knives, razors, and files, for which it is now so famous, was introduced. It has been remarked, that for about a century after this period the manufacturers discovered more of industry and perseverance than of enterprise or ingenuity in the conduct of their business. About 1750 they began, for the first time, to carry on a direct trade with the Continent. The manufacture of plated goods was soon after commenced, and from that period down to the present time, Sheffield has made an astonishing progress in the career of industry, and in many branches of the hardware manufacture has no superior, and in some no rival. Like Birmingham, Sheffield was most probably indebted to her situation for her early application to the hardware business. Coal and iron are found in her immediate vicinity. The Don, on which she is built, and 4 smaller rivers which flow into the Don near the town, supply her with power to work mills for forging, cutting, and preparing the iron and steel used in her manufactures, and in this respect she has an advantage over Birmingham. The river was made navigable to within about 3 m. of the town so early as 1751, and a lateral canal has since prolonged the navigation to the town.

Cutlery, as it was the earliest, so it is still the largest and most important branch of industry. The principal articles are table-knives and forks, pen and pocket-knives of every variety and description, scissors, razors, surgical, mathematical, and optical instruments, scythes, sickles, saws, with all sorts of carpenters' tools, and so forth. The most beautiful and highly finished articles of cutlery exhibited in the shops of the metropolis, though stamped with the vendor's name, are mostly made in Sheffield, and the cutlery of the town is deservedly held in the highest estimation in all parts of the world. With the exception of plated saddlery ware, almost all the other descriptions of plated goods made at Sheffield are reckoned superior to those made at Birmingham or anywhere else. Some of the best plated articles have silver edges, and, when used with ordinary care, last for a long time, and can with difficulty be distinguished from silver. An extensive manufacture of articles of German silver is carried on.

Sheffield produces few articles in copper and brass, and no toys; but, in lieu of these, she has some peculiar and important businesses. The conversion of iron into steel is carried on to a far greater extent here than in any other part of the empire, and most of the steel used at Birmingham and other places is prepared at Sheffield. The manufacture of springs for railway carriages has become an important business. The manufacture of files is one of the staple trades of Sheffield. Files are used in immense quantities at home, and are largely exported. Any one who has ever seen the process of file-cutting would be likely to con-

clude that it was an operation which might be successfully performed by machinery, and a great variety of contrivances have been set on foot with that view. Hitherto, however, none of them has completely succeeded; so that the best files continue now, as heretofore, to be cut by the hand. Few comparatively of the Sheffield manufacturers have large capitals, and the business is not so generally carried on in workshops and factories as at Birmingham. A person worth a few shillings may commence business on his own account as a cutler, and in this class individuals are not unfrequently journeymen one year and masters another, and conversely. It is estimated that the staple manufacture of Sheffield employs above 20,000 hands, one-half of whom, men and boys, are engaged in cutlery and file-making. Wages in Sheffield vary from about 12s. to 40s. a week. The labour in some departments is very severe, and in others great skill is required. Grinders, particularly those who do not use water in their operation, inhale the finer particles of stone and steel, and are usually short-lived. Many efforts have been made to obviate this, as well as to lessen the risk of accidents in the grinding mills; but the employment continues to be more than usually unhealthy and dangerous; and as much skill is required in grinding the finer descriptions of knives and razors, wages, being influenced by both circumstances, are generally high. Many hands are employed in grinding spectacle glasses, most of which, indeed, come from Sheffield. The show-rooms and manufactories of the leading houses are freely opened to all respectable strangers, and afford abundant proofs of the ingenuity that has raised the town to its present importance.

The workmen of Sheffield have been accused of a tendency to riot and insubordination, and no doubt several destructive riots have taken place during the present century, which have required the interference of the military for their suppression; but these have mostly originated in extreme distress, or in some temporary and accidental cause, and, speaking generally, the inhabitants are distinguished by their orderly, good conduct. None of them live in cellars, like the poorer ranks in Liverpool and Manchester, but each family occupies its own house. The workpeople are, in this respect, much better off than those in most other large manufacturing towns, and their houses are also furnished with better and more costly articles than are usually met with in the dwellings of the same class. This favourable peculiarity is the more remarkable from their being in the town itself many old, crowded, and filthy localities.

Sheffield enjoys the advantage of a direct canal communication, eastward to Hull, and by a circuitous route westward to Manchester and Liverpool. The Don was made navigable to Tinsley in 1751. A canal was subsequently cut for the transmission of heavy goods, and the canal-basin of Sheffield is accessible to vessels of 60 tons. More recently Sheffield has been united by railways with all parts of the kingdom. The lines by which she is connected with Great Grimsby on the one hand, and with Manchester and Liverpool on the other, afford peculiar facilities to her import and export trade.

Sheffield had no voice in the legislature till the Reform Act, by which the parish was created a par. bor., with the privilege of sending 2 mems. to the H. of C. Registered electors, 8,759 in 1865. The lighting and watching is conducted by the police commissioners under the authority of a local act. There was no proper municipal corporation till 1843, when the bor. was incorporated by charter, dated the 24th August of that year. It is now

governed by a mayor, 14 aldermen, and 42 councillors. Sheffield is also one of the polling-places at elections for the W. riding, and the seat of a county court. The police force, regulated similarly to that of Manchester, consists of 200 men, including a head constable and 4 inspectors. The par. of Sheffield constitutes, with its out-townships, a poor-law union. Markets on Tuesdays and Saturdays: fairs, Trinity Tuesday for horses and cattle, and on Nov. 28 for cheese.

Sheffield is of great antiquity, and there can be but little doubt that close to or near it there was once a considerable Roman station. A town existed here under the Saxons, and in the reigns of the Plantagenets it was considered of sufficient importance to be defended by a strong castle. Mary queen of Scots was confined for nearly 14 years in the Manor, a country seat near the town, belonging to the Earl of Shrewsbury, the owner, also, of the castle. The latter was seized in the civil wars by Sir John Gell, one of the parliamentary generals, and was demolished, by order of parliament in 1646, there being now no remains except of the foundations. Its site, however, is still called Castle Hill.

SHEPTON MALLET, a market town and par. of England, co. Somerset, hund. Whitstone, on a branch of the Brue, surrounded by several small hills, about 5 m. ESE. Wells. Area of par. 8,770 acres. Pop. 5,347 in 1861. The town, which comprises a number of narrow streets and lanes, has been much improved of late years by the construction of a new bridge, and the opening of new roads: near its centre is a curious market-cross, erected in 1500. The church, in the early English style, is a spacious cruciform structure, with a tower and spire at the W. end. Here is the county bridewell, a large and conspicuous edifice; and here, also, petty sessions are held. There are places of worship for Baptists, Independents, Wesleyans, and R. Catholics; a convent of visitation nuns, the only one of that order in the kingdom; an almshouse founded in 1699; and a free school, established in 1818. The town had formerly a flourishing manufacture of woollen goods, but this branch of industry is now much fallen off. Markets, Tuesdays and Fridays; fairs, Easter Monday, June 18, and August 8, for cattle and cheese.

SHERBORNE, or SHERBOURN, a market town and par. of England, co. Dorset, hund. Sherborne; on the Ivel, which divides the town into two parts, Sherborne and Castleton, 16½ m. N. by W. Dorchester, and 110 m. WSW. London, on the London and South Western railway. Pop. of par. 5,793 in 1865. Area of par. 4,900 acres. Sherborne is finely situated, partly on the acclivity of a hill, and partly in the fertile vale of Blackmore. It is compactly built; its principal streets, running E. and W., are crossed by smaller streets in a contrary direction. It was made a bishop's see in the 8th century, and continued such till 1075, when the see was removed to Salisbury, and Sherborne cathedral became an abbey church. Portions of the abbey, including the refectory, still remain; but it was in great part destroyed by fire in the time of Henry VI. The church, however, chiefly rebuilt after that event, still exists, and is the modern par. church. It is a building of very different dates, but mostly in the perpendicular style; the S. porch is Norman. The groining is generally rich and good, and in the interior are several ancient monuments. The tower is upwards of 150 ft. in height; in it are 6 bells, the largest of which, weighing upwards of 3 tons, was presented by Cardinal Wolsey. The Wesleyans, Independents, Friends, &c. have meet-

ing-houses. The buildings of the free grammar school, founded by Edward VI., adjoin the church, and are built round 3 courts, two of which are used as play-grounds. They comprise a good house for the master, formed of the ancient lady chapels, with upper and lower school-rooms, dining hall, library, numerous dormitories. The course of instruction is principally modelled on the Eton system, though some deviations from it have latterly been introduced. This school has four exhibitions at the universities of 60*l.* a year each, which may be granted for four years to pupils who have already been four years on the foundation; but these exhibitions have not always been filled up. Sherborne has an almshouse founded by Henry VI., which had, in 1836, 24 aged inmates, and an income of 666*l.* a year. There are numerous other charities, including Lord Digby's school for girls, national and Lancastrian schools; and the par. authorities have the privilege of keeping three boys at Christ's Hospital, London, on the produce of lands left for the purpose in 1670.

In the immediate neighbourhood is Sherborne Castle, the seat of Earl Digby, built by Sir W. Raleigh. The mansion is in the form of the letter H; the body, 4 stories in height, having hexangular towers at the 4 angles, which are united with as many wings. It has some antique tapestry and fine paintings. The park comprises 340 acres, and some of the finest oaks in the co. A bridge of 3 arches over the Ivel leads to the house. Pope was a frequent visitor at Sherborne Castle; and on a monument in the church is inscribed his beautiful epitaph in memory of his young friends, the Hon. Robert Digby and his sister Mary.

Sherborne has some silk and woollen fabrics; but these, as well as other branches of industry formerly carried on in the town, have greatly decayed. It is within the jurisdiction of the county magistrates. Assizes were regularly held here till the reign of Edward IV., but have since been only occasional. General quarter sessions are held here on the Tuesday after Easter. Though not a modern parl. bor., Sherborne sent mems. to the H. of C. in the reign of Edward III. Market-days, Tuesday, Thursday, and Saturday; fairs, May 22, July 18 and 26, and October 14, chiefly for cattle and pedlery.

SHETLAND ISLANDS. See **ORKNEY** and **SHETLAND**.

SHIELDS (NORTH). See **TYNEMOUTH**.

SHIELDS (SOUTH), a parl. bor., market town, sea-port, and township of England, co. Durham, E. div. of Chester ward, par. Jarrow, on the S. bank of the Tyne, near its mouth, and directly opposite North Shields, about 8 m. below Newcastle, 16 m. NNE. Durham, and 272 m. N. London by Great Northern railway. Pop. of bor. 35,239 in 1861. South Shields and its sister town on the opposite bank of the river may be regarded, in some measure, as the outports of Newcastle, their pop. and importance having grown up with the increasing magnitude of the coal trade and commerce of the latter. Its lower part consists principally of a narrow, crooked, and inconvenient street, extending for nearly 2 m. along the river; but the streets in the upper part of the town are wider and better built, and lighted with gas. The principal edifices and institutions are the town-hall, also used as an exchange, a neat building in the centre of a spacious market-place; a theatre, a scientific and mechanics' institution, charity-school, dispensary, and the various places of worship. The church, dedicated to St. Hilda, is of considerable antiquity, but has been frequently repaired and modernised. The living is a curacy, in the gift of the dean and chapter of Durham,

worth 330*l.* a year. There are chapels for various dissenting sects, to most of which are attached Sunday schools, and various charities and benevolent societies. In the town-hall petty sessions are held twice a month, besides courts leet and baron by the dean and chapter of Durham, as lords of the manor. Although the appearance of South Shields has little to recommend it, and its buildings are far from imposing, yet it is a place of much importance. The river Tyne is here about two-thirds the width of the Thames below London Bridge; and the vessels which belong to or rendezvous at N. and S. Shields are disposed in tiers on each side, as in the port of London. The town is rapidly increasing; a considerable quantity of ground is marked out for building in the E. and S. directions, and no doubt can be entertained that if land, upon a freehold tenure, could be procured, the rate of increase would be much more rapid, and the scale of buildings greater. The whole of the chapelry is the land of the dean and chapter of Durham. South Shields had formerly many salt-pans, and an extensive manufacture of salt; but this has been abandoned, and ship-building is now the staple business of the town, and is very extensively carried on. It has, also, very extensive glass-works, a pottery, a coal mine (which may be said to be in the town), and manufactories of soda and alum. Still, however, the main dependence of the town is on the coal trade of the river. Most of the large colliers belonging to Newcastle load at South Shields, the coal being brought down the river in lighters, or *keels*; and as many as 500 vessels are frequently seen lying together in the haven. There belonged to the port, on the 1st Jan. 1864, seven sailing vessels under 50, and 307 above 50 tons, besides 18 steamers, of an aggregate burthen of 286 tons. The Reform Act conferred on South Shields the privilege of sending one mem. to the H. of C. The parl. bor. comprises the townships of South Shields and Westoe. Reg. electors, 11,75 in 1865.

Mr. Greathead, of this town, invented the life-boat, the first being built here, by subscription, in 1790. Markets on Wednesdays: fairs, last Wed. in April and first in May, last in Oct. and first in Nov.

SHIRAZ, the second city of Persia, prov. Fars, or Persia Proper, formerly the cap. of the empire, in a valley 115 m. NE. Bushire, and 220 m. SSE. Ispahan; lat. 29° 36' N., long. 52° 44' E. Pop. variously estimated at between 20,000 and 40,000. Shiraz has always been celebrated for the beauty and fertility of its neighbourhood, which has been warmly eulogised by the poet Hafiz, a native of the city. It is surrounded with high walls, flanked with round bastions, and has 6 gates, each with 2 towers. On entering the city, the houses, which are in general small, together with the narrow filthy streets, give the stranger but a mean idea of the second city of the empire. The great bazaar, or market-place, built by Kerim Khan, forms, however, a distinguished exception to this general remark. It is about $\frac{1}{4}$ m. in length, made of yellow burnt brick, and arched at the top, having numerous skylights, which, with its doors and windows, always admit sufficient light and air, whilst the sun and rain are completely excluded. The *ark*, or citadel, in which the begler-beg of Fars resides, is a fortified square of 80 yards. The royal palace within is far from being an elegant structure; and some pillars, its greatest ornament, were removed by Aga Mahomed Khan to adorn his palace at Teheran. Shiraz seems to be rapidly hastening to decay; and most of its public structures, once very numerous, are already in a ruined

very large edifice, having been the palace of Atabeg Shah, its founder. There are 15 considerable mosques, besides many others of inferior note, 11 *medressehs* or colleges, 14 bazaars, 13 caravanserais, and 26 *kumums*, or baths. The principal college has upwards of 100 rooms; but it, as well as most of the others, is now nearly abandoned by students. Within the walls of the city are numerous Mussulman tombs. The climate was formerly distinguished for salubrity, but it has materially changed for the worse. The heat of summer is excessive, rising sometimes to 110° Fahr. in the shade. The water of Shiraz, owing to the neglect of the city authorities, is also very bad.

About $\frac{1}{2}$ m. from the town is the tomb of Hafiz, the Anacreon of Persia. It stands within a quadrangular enclosure, and consists of a block of marble, on which two of the poet's odes are sculptured, with the date of his death. His works are not, as has been stated, chained to the tomb, but a copy of them is kept in an adjacent chamber. Adjoining are the stream of Rocknabad and the bower of Mossella, so celebrated in the verses of the poet; the former consisting merely of a small brook of clear water, not more than 2 ft. wide, while of the bower not a shrub remains, and its site is only marked by the ruins of an ancient tower. The celebrated garden of Jehan Nama, near the tomb of Hafiz, is a walled enclosure about 200 yards square, laid out in walks bordered with cypress trees, and watered by a variety of marble canals and artificial cascades. This and many other gardens in the neighbourhood are ordinary places of resort, where the citizens chat, smoke, and drink coffee. The tomb of the poet Saadi is also in the vicinity of Shiraz, with various conventual buildings for dervishes.

Shiraz is celebrated for its wine. The principal vineyards are situated at the foot of the mountains to the NW. of the town, where the soil is rocky, and the exposure extremely favourable. It would appear, however, that the culture of the vine has degenerated; and, whatever may have been the case formerly, little care is now taken in the preparation of the wine. It is of various qualities; but the best of the white varieties is inferior to good Madeira, and the best varieties of the red (ruby wine of Hafiz) are not unlike tent, and seem to have but slender claims to the praises that have been lavished upon them. The produce of wine may amount in all to from 80,000 to 100,000 galls., of which from 10,000 to 15,000 galls. may be exported to India, Bagdad, and Bussorah. The commerce of the city is still rather extensive; it is principally with Bushire, Yezd, Ispahan, and the cities in the NW. of Persia.

From Bushire, the chief imports are spices, Chinese, and Indian goods of all kinds, iron, lead, quicksilver, glass wares, woollen cloths, muslins, linens, arms, ammunition, cutlery, and other European manufactures. These goods, with salt from the neighbouring lakes, are sent to Ispahan, Teheran, and Yezd, in exchange for the manufactures of those cities and other products. The exports to Bushire consist principally of wine, rose water, and attar of roses; assafetida, dried fruits, silk, goats' hair, Caramanian wool, saffron, drugs, horses, orpiment, madder, and tobacco. The trade between Shiraz and Bushire employs above 2,000 mules.

Shiraz has no vestiges of remote antiquity, and was probably not founded till after the propagation of Mohammedanism. It had become a populous town in the 10th century, and soon afterwards it was surrounded with walls. Its greatest benefactor, however, appears to have been Kerim Khan,

who reigned in the latter half of the 18th century; since his death it has gradually declined.

SHOREHAM (NEW), a parl. bor., market town, sea-port, and par. of England, co. Sussex, rape Bramber, hund. Fishergate, at the mouth of the Adur, about 1 m. from the English Channel, and 6 m. W. Brighton, on the London, Brighton, and South Coast railway. Pop. of parl. bor. 32,622 in 1861, and of par. 3,351. Area of par. 170 acres. New Shoreham appears to have risen on the decay of Old Shoreham, now an insignificant village about 1 m. distant, but formerly a place of some importance. The town is built in a singular manner, and near its centre is the market-house, supported on Doric pillars. The parish church is the remaining portion of a large cross church, of which nearly all the nave has been destroyed; it has various portions of fine late Norman gradually running into early English forms and details. The interior is remarkable for elegance and richness. The living is a vicarage, worth 127*l.* a year, in the gift of Magdalen College, Oxford. There are meeting-houses for Independents and Wesleyans. The turnpike road is crossed by a suspension bridge, built by the Duke of Norfolk, over the Adur. Shoreham has only a tide-harbour, but it is the best on this part of the coast, and having 18 ft. water at spring-tides, it is sometimes frequented by ships of considerable burden. Ship-building is the principal business, and vessels of 700 tons have been built here. It has, also, a considerable general trade, the gross customs' revenue collected here in 1863 having amounted to 8,284*l.* It is governed by two constables, chosen annually at the court-leet of the lord of the manor. It was a bor. by prescription, and sent 2 mems. to the H. of C. from 1298 down to 1771, when the electors, having been convicted of gross corruption, the rape of Bramber was incorporated with the bor. Reg. electors, 1,869 in 1865.

SHREWSBURY, a parl. and mun. bor. and market town of England, co. Salop, of which it is the cap.; nearly in the centre of the co., in a peninsula formed by the Severn, on two gentle declivities, 50 m. S. by E. Liverpool, 138 m. NW. London by road, and 163 m. by London and North Western railway. Pop. of bor. 22,163 in 1861. The town is separated from the river by garden and meadow ground, skirted by a range of genteel houses, and its exterior appearance is from many points striking. The streets, as in most ancient towns, are irregular, and many of the houses have an antique appearance, presenting gables and overhanging stories to the road; but various improvements have been made of late years in the thoroughfares, especially in lighting and flagging. The river is here crossed by two handsome stone bridges, built by subscription, called respectively the English and Welsh bridges: the former, completed in 1774, at a cost of 16,000*l.*, is 410 ft. in length, and consists of seven semicircular arches; the other, or Welsh bridge, finished in 1795, at a cost of 8,000*l.*, is 266 ft. in length, and has five arches. Adjoining the latter is a quay and warehouses. Among the chief public buildings are the royal free grammar school; the town and co. hall, a handsome building; the market-house, built in the reign of Elizabeth, and unequalled in point of ornamental decoration by any similar structure in the kingdom; and the co. gaol and bridewell for the town, near the castle, built on Howard's plan in 1793, at an expense of 30,000*l.* There is also a Doric column, at the entrance to the town from London, in honour of Lord Hill, 116 ft. in height, surmounted by a colossal statue of his lordship; a neat infirmary, 150 ft. in length, established in

1745), and rebuilt in 1830 at a cost of 18,736*l.*; the house of industry, on the S. bank of the Severn, for the poor of the six parishes of Shrewsbury, finished for a foundling hospital in 1765; the theatre, rebuilt in 1834, on the site of the royal residence of the princes of Powysland; a butter and cheese hall in Castleforegate, and a savings' bank.

Shrewsbury has nine churches, most of which are embellished with rare and beautiful specimens of stained glass. The church of St. Chad is a handsome modern structure, formed by the intersection of two circles, with a tower and portico attached; the smaller of the circles being occupied by a grand staircase, and the larger one, 100 ft. in diameter, being the body and chancel of the building. St. Mary's, a cross church, of Norman and early English architecture, has a spacious chancel and chantry chapels, and a fine tower surmounted by a spire, one of the loftiest in the kingdom. The abbey church, the W. portion of a Benedictine monastery, founded by Roger de Montgomery, first earl of Shrewsbury, in 1083, displays many curious features of Norman architecture, combined with the earlier pointed style: the great W. window of the tower is only equalled by that of York cathedral: the aisles contain several fine old monuments, and opposite the S. entrance is an elegant octagonal stone pulpit: the interior forms a beautiful oriel, the roof being vaulted on eight delicate ribs: it formerly stood in the refectory. St. Giles's is a small but handsome edifice, built in the early part of the 12th century. St. Alkmund's was rebuilt in 1795, in the modern Gothic style, with the exception of the tower and spire, 184 ft. in height, which are singularly elegant. St. Julian's is a plain oblong building of brick, rebuilt in 1749; the tower belonged to the old church. St. George's, St. Michael's, and Trinity churches have been erected in recent years. The first is of freestone, and cruciform, in the lancet, or early pointed style. The two latter are of brick, in the Doric style, affording ample accommodation in free-sittings. Some of the parishes extend into detached parts of the adjacent country, where there are four chapels of ease belonging to St. Mary's, and one to St. Chad's.

Besides the churches, there are places of worship for Roman Catholics, Wesleyan Methodists, Independents, Baptists, and Unitarians, with attached Sunday schools, and a meeting-house for the Society of Friends. A large national school, founded in 1778, is attended by about 350 children of both sexes, and nearly an equal number of boys are instructed in a Lancastrian school. Allat's charity school provides clothing, instruction, and an apprentice fee, for 30 children of each sex. Bowdler's school, in the par. of St. Julian's, was established in 1724 for a similar purpose; and in the suburb of Frankwell, across the Welsh Bridge, is a hospital, founded in 1734, which, besides supporting 12 aged people of each sex, furnishes instruction to 25 boys and 25 girls of Frankwell. There are several almshouses belonging to different foundations, and attached to particular pars.

The most distinguished public charity of Shrewsbury, however, is the free grammar school, founded and endowed by Edward VI., but greatly enlarged by Queen Elizabeth. This school, prior to the close of the last century, had, owing to certain defects in the original rules and ordinances, fallen to decay; but in 1798 an act was passed 'for the better government and regulation of the free grammar school of Edward VI.,' by which the management of the school was vested in the

time being. At the same time, the number of masters on the foundation was reduced from four to two, and their appointment was vested solely in St. John's College, Cambridge. The income arising from the endowment is about 2,600*l.* a year, besides which it confers several advantages on its *alumni* at both universities, viz. four exhibitions of 70*l.* and four of 15*l.* each, at St. John's, Cambridge; four of 60*l.* each at Christ Church, Oxford; one of 100*l.*, and three of 25*l.* each, either at Oxford or Cambridge; three contingent exhibitions; and six scholarships, with one by-fellowship at Magdalen College, Cambridge. Prizes are annually awarded to merit; and to the best scholar proceeding to college is given the Sidney gold medal, having on its obverse the bust of Sir Philip Sidney, who, with his friend Fulke Greville, afterwards Lord Brook, the poet, was educated in Shrewsbury school. During the present century the school has attained high celebrity, from the learning and talents of its master and (afterwards) visitor, Dr. Butler, late bishop of Lichfield and Coventry, in consequence of the success of his pupils in competitions for prizes, exhibitions, and other honours, at the universities. In Dr. Butler's time, the sons of the gentry were sent here from all parts of the kingdom, and the establishment for many years past comprised, independently of the free scholars (who must be sons of burgesses), many pupils paying handsome sums to the masters for board, lodging, and instruction. The school-house, erected in 1680, on the site of a more ancient wooden building, is a lofty structure of freestone, forming two sides of a court, the third side of which is formed by the library and chapel: a court is entered by a gateway, having columns on each side, with a Greek inscription over the arch. Two large houses belonging to the masters, contiguous to the schools, comprise every accommodation for boarders; and there are large play-grounds in front and at the back of the schools.

The town has a literary and philosophical society; a mechanics' institute, and a public library with nearly 6,000 vols.; the assembly rooms and theatre are well attended during winter; and races are annually held in the neighbourhood. On the S. side of the town is one of the most celebrated promenades in the kingdom, called the Quarry. It is formed in meadow ground gradually sloping to the river, along which extends a graceful avenue of lofty lime trees, 540 yards in length. Shrewsbury was formerly of considerable importance as a mart for flannels from Welshpool and Newtown; but this branch of trade is nearly extinct. It has, however, a large factory for spinning flax, with some smaller factories and a large iron foundry, the whole furnishing employment to several hundred persons. The prosperity of the town, however, does not depend solely on its trade, as it is a favourite place of resort for persons of small income, or who have retired from business. The Severn, which even here is celebrated for its salmon, is navigable as far as Shrewsbury by vessels of from 30 to 60 tons, and a canal to Wombbridge opens a communication with the coal districts of Staffordshire. The vicinity being a good barley country, the malting business is carried on to a considerable extent.

Shrewsbury, which has received many royal charters, especially from Richard I. and Charles I., is divided into five wards, and is governed by a mayor and 5 aldermen, with 30 councillors. Quarter and petty sessions for the bor. are held here under a recorder and there is a county court.

bury has sent 2 mems. to the H. of C. since the reign of Edward I., the right of election down to the Reform Act being in burgesses paying scot and lot, and not receiving alms or charity. The electoral limits were enlarged by the Boundary Act, so as to include 1 entire par. and parts of 2 others, with the old bor. Reg. electors, 1,505 in 1865. Markets on Wednesday and Saturday; fairs on the second Tuesday and Wednesday in each month, for cattle, horses, cheese, and butter.

Shrewsbury is supposed to have been built after the Roman station *Uriconium* had been destroyed in the 5th century. William the Conqueror gave the town and surrounding country to Roger de Montgomery, one of his followers, who built here a strong baronial castle, the keep of which still remains, being converted into a modern dwelling-house. In 1102 the castle and property were forfeited to the crown. Shrewsbury, from its situation close to Wales, was the scene of many border frays between the Welsh and English; and, in 1277, Edward I. had his quarters here. On the 21st of July, 1403, a desperate battle was fought near the town, between the royal army, commanded by Henry IV., and that of the rebel Earl of Northumberland, under the command of the famous Lord Percy, surnamed Hotspur: the death of the latter, by an unknown hand, decided the victory in the king's favour: the loss on both sides was immense. During the wars of the Roses, Edward IV., after the defeat and death of his father, Richard duke of York, raised an army among the townspeople, with which he defeated the opposite faction at Mortimer's Cross. In the war between Charles I. and the parliament, the inhabs. warmly espoused the cause of the former; but in 1664 the town yielded to the parliamentary troops under Col. Mitton, and the fortifications were destroyed. Dr. Taylor, the learned editor of 'Demosthenes,' and the author of 'Elements of the Civil Law,' was the son of a barber of this town, where he first saw the light in 1703. It was, also, the birthplace of Dr. Burney, the author of the 'General History of Music.' The surrounding country is picturesque and highly cultivated, the plain extending every way for about 13 m., beyond which are lofty ranges of hills. About 22 m. from the town is Boscobel House, where the Penderell family concealed Charles II. after his defeat at the battle of Worcester.

SHROPSHIRE. See SALOP.

SHUMLA, a city and strong military position of Turkey in Europe, on the N. declivity of the Balkhan (anc. *Mons Hæmus*), on the great road from Constantinople to Rustchuk, 63 m. SE. the latter, and 290 NNW. the former. Pop. estim. at 20,000. In a military point of view, Shumla is to be regarded as a vast entrenched camp. It occupies the declivity of a gorge in the mountains, which incloses it on three sides, like a horse-shoe; and on the fourth side, which descends into the plain, it is protected by a small hill, on which is a strong redoubt. The space occupied by the town is about 3 m. in length by 2 m. in breadth. In the last century it had pretty strong walls, but these have been all but destroyed. It is now defended by some outworks and by a citadel, which has been greatly enlarged and strengthened since 1836. Its real defence consists, however, in the strength of its position: the plain to the N. of the town, on which the attacking army must encamp, is exceedingly unhealthy; and the surrounding mountains being steep, separated by deep rocky ravines, and covered with thick brushwood, which affords excellent cover for troops. The Russians attempted to take Shumla in 1774, 1810,

principal defect, in a military point of view, is the great number of troops required for its effectual defence; and the fact, as shown by the Russians in 1829, that it may be turned.

Shumla is intersected by a rivulet, and is divided into the upper and lower towns. The former is principally inhabited by Turks; it has fine new barracks, numerous mosques, covered with tin and copper, and, which is unique in Turkey, a town clock which strikes the hours, with a bell, introduced by a pacha, who had been in Russia. The lower town, in which the Jews and Christians reside, is unhealthy, from, as is said, the influence of the adjacent marshes, but more probably from the filth of all sorts thrown into the rivulet which flows through the town. The tinmen and braziers of Shumla are the best in Turkey, and supply Constantinople with their wares. It has also some manufactures of silk and leather, and ready-made clothes are manufactured in large quantities for sale to the merchants of the capital. It is the residence of a pacha and a Greek archbishop.

SHUSTER, a city of Persia, prov. Khuzistan, on the Karoon, 165 m. SW. by W. Ispahan, and 50 m. ESE. Shus, with which city it has disputed, though, as generally supposed, unsuccessfully, the distinction of representing the an. *Susa*. Lat. 32° N., long. 48° 59' E. It was formerly the cap. of the prov., but having been depopulated by the plague in 1832, Dezful is now the cap. It may still, however, have 15,000 inhabs. The town spreads E. from the river in a semicircular form, covering undulating ground, surrounded in its whole circuit by a wall of unburned bricks, and washed by an artificial canal on one side, and the Karoon on the opposite. The houses are principally of stone. The canals and dykes about the town are extensive, but ill kept. Water is conveyed to all parts of the city by petty aqueducts. The ruins of a castle exist on a height near the remains of an ancient bridge, carried away by a flood in 1832. There are no remains at Shuster that show it existed prior to the Sassanian dynasty; but, on the opposite bank of the Karoon, there are numerous chambers excavated in the rock, and N. of the city walls are the traces of a much more ancient town, which appears to have extended on both banks of the river, being in this respect different from the anc. *Susa*. (Chesney, Rawlinson, in *Geog. Journ.*, iii. and ix.) The inhabs. formerly manufactured large quantities of woollen stuffs, which they exported to Bussorah, in return for Indian commodities brought from thence.

SIAM (called by the Birmese *Yoodra* or *Yuthia*), an extensive country of India-beyond-the-Brahmaputra, comprising, with its dependent states, most of the central and S. parts of that peninsula; extending between the 6th and 20th degs. of lat., and the 98th and 105th of E. long.; having N. the Laos country, E. the emp. of Anam, W. the Birmese emp., the British provs. of Tenasserim, and the Indian Ocean, and S. the Gulf of Siam, which it encloses on three sides. Its area has been very variously stated, but probably amounts to 190,000 sq. m. Its population has been estimated, though on very vague and unsatisfactory data, at 3,000,000, of whom, probably, 1,500,000 are native Siamese, 800,000 Shans, 250,000 Malays, and 450,000 Chinese settlers.

Physical Geography.—The central part of this kingdom consists of the fertile valley of the Me-nam, one of the principal rivers of SE. Asia, and the prov. of Chantillon, on the E. side of the Gulf of Siam, is also very fruitful; but, with

far at least — it is known to Europeans, is mountainous and rugged. The mountain chain, which traverses the Malay peninsula and separates Siam proper on the W. from the valley of the Than-lweng or Saluen river, sometimes rises to the elevation of 5,000 feet; and a similar chain shuts it off on the E. from its Cambodian province of Battambang. The only navigable rivers of any consequence are the Me-nam, the Me-kon or river of Cambodia, and the Than-lweng. The last two belong only partially to Siam. The Me-nam or Mei-nam (mother of waters) runs, on the contrary, through the heart of Siam, the principal towns of which are situated on its banks. According to native accounts, the Me-nam has its origin in the table-land of Yun-nan, whence it flows generally in a S. direction to the head of the Gulf of Siam, entering the latter near lat. $13\frac{1}{2}^{\circ}$, and long. 101° E., after a course roughly estimated at 800 m. It is navigable for small boats as far as Changmai, or Zimmey, and large vessels ascend to Yuthia, the old cap. of Siam. In its progress it encircles several islands; and at Bangkok, about 15 m. direct from the sea, it divides into three separate channels. Only the most easterly of these, or Pak-nam river, is navigable for large ships, the others being obstructed by shallow bars at their mouths; and even the Pak-nam branch has a bar 10 or 12 m. broad, with but $1\frac{1}{2}$ fathom water at low tide; so that, even when lightened, vessels entering or leaving the river not unfrequently get aground, though, the bottom being soft mud, they sustain no injury. The Me-nam, its numerous tributaries, and the other rivers of Siam, annually overflow the country in July and the succeeding months.

The climate, except in the marshes left after the inundations, is usually salubrious, though the smallpox and cholera sometimes make great ravages. At Bangkok the mean tem. of the year is about 83° Fah.; the heat is, however, not of an oppressive character, and the annual range of the thermometer is stated to be only about 13 degs. What is called the cool season lasts from Nov. to Feb.; March, April, and May constitute the hot season; and the wet season continues during the rest of the year.

Natural Products.—Iron is found in the mountain ridges on either side the valley of the Me-nam; there are also mines of tin, copper, and lead; and the precious metals are procured in small quantities. But the mineral products of the country are but little known or explored.

Siam is, perhaps, the cheapest country in the world for rice, which is commonly under 2s. and often costs only 1s. per cwt. This is ascribable principally to the natural richness of the soil, and the fact of its being annually overflowed by the Me-nam, or Nile of Siam. Here, as in most eastern countries, government is supposed to be the principal proprietor of the soil, but the tenants who pay the land tax run but little chance of being ejected; it is said, however, that gardens, orchards, and houses are viewed as the private property of the occupants. The Chinese are at once the principal cultivators and leaders in every branch of industry.

Besides rice, Siam yields nearly all the most valuable products of the East, and, under an intelligent government, might furnish vast quantities for exportation. Sugar, pepper, tobacco, the finest fruits, are the principal articles of culture; and the forests, which cover a large proportion of the surface, produce teak, sandal, sapan, rose, eagle, and a variety of other variegated and perfumed

floated down 300 m. from the interior to the capital, and is there almost wholly employed in the construction of native junks, very little being exported. Iron, copper, tin, lead, and gold are the principal mineral products; the gold is obtained by washings, the tin mostly from the tributary Malay territories. The wild animals are similar to those of Hindostan and the adjacent Ultra-Gangetic countries: the elephant is most abundant, and is extensively employed. A very rare or white variety of the elephant is sometimes found here, and is held in the highest estimation. Indeed, one of the titles of the Siamese monarch is, 'lord of white elephants,' several of which are maintained as state appendages at the royal court. 'He who discovers one of these animals,' says a traveller, 'is regarded as the most fortunate of mortals. The event is of that importance that it may be said to constitute an era in the annals of the nation. The fortunate discoverer is rewarded with a crown of silver, and with a grant of land equal in extent to the space of country over which the cry of the elephant may be heard. He and his family, to the third generation, are exempted from all sorts of servitude, and their land from taxation.' The rhinoceros is more plentiful in this than in most other countries; tigers, though inferior in strength to those of Bengal, are also common.

Races of Inhabitants.—The Siamese appear to be of the same stock with the Laos Shans, to whose country their traditions point as their original seat. They are characterised by a broad forehead, a hairy scalp descending so low as to cover, in some instances, the whole of the temples: the lower jaw is long, and remarkably full under the zygoma, so as to give a square appearance to the countenance. Eyes small and oblique; lips thick; mouth large; beard scanty; hair coarse, lank, and uniformly black; but that of the chin is softer and of a lighter colour than is usual among the Ultra-Gangetic nations, heightened among the upper ranks by a bright yellow wash. Limbs thick, short, and stout; trunk square; they have a strong tendency to obesity; average height of men about 5 ft. 3 inches. Travellers agree in representing the Siamese as crafty, mean, ignorant, conceited, servile, and rapacious. Indolence, as might be expected, is also one of their prominent traits. They have, however, some redeeming qualities, being exceedingly attached to their children, reverential to parents, temperate, and, except on great provocation, gentle in their manners. The upper classes, however, are offensively coarse, manifesting a total disregard for the feelings of others, and an unbounded arrogance. The Laos, or Shans, tributary to Siam, inhabit principally the N. part of the country, where they are divided into several tribes. (See LAOS.) The Chinese settlers are mostly immigrants from the provs. of Canton and Fokien, and the island of Hainan. They resort to Siam unaccompanied by their families, intermarry with the Siamese, and adopt their form of religion, with most of their habits. Each male above the age of 20 pays a capitation tax. The greater number of them are employed in trade, or, if within the tributary Malay states, in working gold and tin. At Bangkok there are a good many Cochinese and some settlers from Hindostan, most of whom are Mohammedans. The Portuguese Christians, or their descendants, of whom there may be about 2,000, are engaged in commercial pursuits, as interpreters, &c., and are mostly in indigent circumstances.

existing circumstances, can it well be otherwise. All mechanics who evince any skill are immediately seized upon, and made retainers of the king or of some person in authority, who employs them for life in some useless service of vanity or ostentation. Hence there is, as it were, a premium on barbarism, and labour is dear and difficult to procure. The ordinary mechanics are, in fact, usually natives of China or Cochin-China. In no one useful art have the Siamese ever attained distinction. They make no fabric that can bear to be compared with the cottons of Hindostan, the silks of Birmah, or the porcelain of China. Even in the fabrication of jewellery, a profeiciency in which has been often remarked among ruder people, they exhibit little skill; and, in fact, their gold and silver trinkets, plate, and articles of zinc, tin, and brass, are all imported from China, or obtained from the Chinese settlers. It is through the ingenuity of the latter that the iron ore with which the country abounds has been of late years rendered available. At present a good deal of malleable iron is produced, and at Bangkok there are several extensive manufactories of cast-iron vessels; but these are wholly conducted by Chinese. The latter have also introduced the culture of sugar, now become a staple product, and have created a taste for commerce and the means of carrying it on. The cutlery and tools in use among the Siamese are of the rudest and simplest description; and, though the people fabricate arms, they have acquired no skill in the art, and fire-arms have always been supplied by Europeans. Even the coarse brown pottery in use is mostly made by Peguans. The art of dyeing is on the lowest scale, though the country abounds in the necessary materials; and printing silks and cottons is not practised by the Siamese in any shape or form. The Siamese population of this country is nearly, if not quite, stationary, and the greater part are engaged in its culture. Much more would be grown if the people were masters of their own time; but every Siamese male is obliged to work for the king during three months of the year, and there is no absolute certainty at what time he may be called to do so. Beyond the regular service the men are often called on to attend the kings on any journey they may make; and although the number so called is not so numerous as was formerly the case, owing to their majesties having provided themselves with steamers, and being able thereby to dispense with the manual labour required for propelling the royal barges, yet the very liability of being so called prevents many from growing more rice than they require for their own consumption.

Architecture is in the same low state as the other arts. The habitations in the alluvial grounds are all raised on piles, as in the rest of India-beyond-the-Brahmaputra, though on the higher lands piles are dispensed with. But the houses are nearly all of the same fragile materials, among which the bamboo and Nipa palm-leaf are the principal; and it is only in the capital or in the other towns that any are to be seen constructed of brick and mortar, and roofed with tiles. The temples though surrounded with brick enclosures, consist chiefly of timber-work; and, though laboriously carved, gilt, and otherwise adorned, exhibit no taste. Edifices for public convenience and utility seem to have no existence; and neither piety, superstition, charity, nor interest, seem to have led the rulers of this country to construct bridges, wells, tanks or caravanserais. The bridges, even at the capital, consist only of planks, and no where do we observe any attempt to construct an arch. The absence of public roads is

not less remarkable. There are but two of any consequence in the kingdom; one from Bangkok to Yuthia, and another from Chantibon to Tung-gai. In the N. and on the Malay isthmus, elephants are used to convey merchandise across the narrow mountain pathways; but these animals are prohibited, except to a few favoured individuals, in most of the towns, and even in Bangkok wheel-carriages are unknown. But internal navigation is so extensive, cheap, and commodious, that in all the central part of the country it supersedes the necessity for roads.

Commerce.—The foreign trade of Siam was conducted formerly chiefly with China, Anam, Java, Singapore, and other British ports within the Straits of Malacca; but since the year 1855, when Sir J. Bowring succeeded in concluding a treaty of commerce, a considerable trade has also sprung up with Great Britain. However, the most important branch by far of the foreign trade is with China. This is estimated to employ at least 200 junks annually, many of which are of 500 or 600, and some not less than 1000 tons. They are all of Chinese build, though mostly constructed in Siam; some are owned by Siamese merchants, but many more by Chinamen residing in Bangkok, and the crews are never Siamese. These vessels make but one voyage a year, going in one monsoon and returning in the other. Most of them arrive at Bangkok in Dec. and Jan., but they continue to come from the more distant ports till April, and sail from the Me-nam in June and July. Numerous small vessels keep up a constant intercourse with the coasts of the Gulf of Siam and the neighbouring islands; and two or three Siamese ships, built on the European model, trade to Singapore. An artificial canal, kept in good order, connects the Me-nam with the Camboja river; but the trade by it, as well as by Cochin-Chinese sea-going vessels, has been depressed of late years, owing to hostilities between Siam and Anam. Bangkok is the great emporium of trade; and has the largest commerce, next to Canton, of any city not peopled by Europeans, or their descendants. The total amount of shipping which entered the port during the year 1860, excluding junks, was 265 vessels, of 106,910 tons, against 214 vessels, of 88,460 tons, in 1859, showing an increase of 66 vessels, or 23,350 tons. (Report of Sir Robert H. Schomburgh, British Consul at Bangkok.) The imports into Siam from China consist of earthenware and porcelain, spelter, quicksilver, tea, laksoy, dried fruits, raw silk, crapes, satins, and other silk fabrics, with nankeens, shoes, fans, umbrellas, writing paper, incense, and Chinese immigrants. From the Malay archipelago, and the countries to the westward, the chief imports are British and Indian piece goods, arms and ammunition from Europe, woollen cloths, a little glass-ware, and commodities suited for the Chinese markets, as pepper, tin, dragon's blood, rattans, *biche-de-mer*, esculent swallows' nests, and Malay camphor. Besides these articles, the principal exports to China and elsewhere are sugar, cardamoms, eagle, sapan and rose woods, mangrove bark, cotton, ivory, stick lac, rice, areca nuts, salt fish, the hides and skins of oxen, buffaloes, elephants, rhinoceroses, deer, tigers, leopards, otters, buffalo, ox, deer, and rhinoceros horns; bones, sinews, and feathers. The trade in several of the most valuable products is a royal monopoly; but the trade in sugar and pepper, the two great staples of the country, is free. The two kings of Siam have, in recent years, largely engaged in trade, being shipowners as well as general merchants. In 1860 they owned twelve vessels at the port of Bangkok. (Consular Report.)

Gold and copper are not used as money in Siam: the only coin is of silver, being merely a small bar turned in at the ends, and stamped on one side. Cowries are the ordinary medium of traffic, and 12,800 go to the tical, which is estimated to be worth 2s. 6d. The ordinary weights are the picul and catty; the former is the same as the Chinese, and divided into 50 catties of 2½ lbs. each. The Siamese fathom is about 6 ft. 6 in.: the *sen*, a land measure, of 20 fathoms square.

The government is an absolute monarchy, but with this peculiarity, that there are two kings instead of one. The first, however, is the chief, or absolute ruler of the state, the functions of the second king being bereft of any exercise of high authority. The manners of the court and the etiquette observed are nearly the same in the present day as they are described by the earliest European travellers. The first king, one of whose titles is 'the God Boodh,' is supposed by his subjects to be a deity, and is revered as such; an immeasurable distance being supposed to exist between him and the highest of the nobility. Next to the two kings, the nobility absorb most of the legislative and executive power; there being, except in some case of appeal, no establishments exclusively for judicial purposes. The Siamese have, indeed, written laws; but it frequently happens that the first king, on his accession, publishes a new edition, with his own interpolations, though neither the original code nor the changes introduced appear to be much regarded by the administrators of the laws. The same chiefs who are charged with the military, civil, and revenue administration, are the only judges and magistrates. According to the laws of inheritance, a man must leave his property to his family in preference to strangers; but no claim of primogeniture is recognised, the children usually sharing equally. The nature of the marriage contract is much the same as in other eastern countries, polygamy being permitted, and divorces obtained without difficulty. A breach of the marriage vow is not visited with so severe a penalty as in Anam, but is usually expiable by a pecuniary fine.

The penal code of Siam bears a strong analogy to that of China, especially in the liberal and indiscriminate use of the bamboo for the punishment of all minor offences. For crimes of magnitude, the punishments, as in Birmah, are of the most savage description; torture may also be applied to extort evidence. They have, also, the same sort of ordeals for determining the guilt or innocence of accused parties that were common in Europe during the middle ages.

Armed Force.—Every male inhabitant, from the age of 21 upwards, is obliged to serve the state for four months a year. The following individuals are, however, excepted: members of the priesthood, the Chinese settlers, who pay a commutation tax, slaves, public functionaries, the fathers of three sons liable to service, and those who purchase exemption by a fine of from six to eight ticals a month, or by furnishing a slave or some other person not subject to the conscription, as a substitute. There is no standing army. The principal force of the Siamese consists in their elephants; but when contrasted with Europeans, their army may be said to be contemptible. At Bangkok, there is a numerous navy of war-junks and galleys, built on the Chinese model, and mounting heavy guns, manned by Chinese and other foreigners.

The public revenue is estimated at about 3,145,000*l.* sterling a year; of which sum, the

287,000*l.*; tax on fruit trees, 65,000*l.*; on pepper, 50,000*l.*; on spirits and gambling, about 57,000*l.* each; the customs, 33,000*l.*, &c. But, exclusive of the taxes paid in money or produce, the people are subjected to *corvées*, and other oppressive burdens. The collectors receive no salary, being remunerated by a tithe of the revenue realised: an arrangement which generates a variety of abuses. The receipts and expenditure are said nearly to balance each other, but there is seldom any large sum in the public treasury.

Religion.—The worship of Boodh is nearly universal in the countries lying E. of Hindostan, but the Buddhism of S. is very different from that of N. Asia. Gaudama is worshipped in Siam under the name of Somona Codom. Every male Siamese must enter the priesthood once in his life, though he may quit it again at pleasure. The *talopouns*, or priests, live together in monasteries, sometimes containing several hundred individuals, endowed by the government or by wealthy persons. The papal church has maintained missions in Siam for nearly 200 years, but there are only about 2,200 R. Catholics in the country, including 800 Anamese, and several descendants of Portuguese. Neither do the American Baptist and other missions appear to have made many proselytes.

Manners.—The inhabs. of Siam are decidedly lower in civilisation than either the Anamese or Birmans. They are less gross, however, in their eating than the former, and women are not so much degraded among them as among the latter. They are also more generally acquainted with reading and writing than the Birmese. Both sexes dress nearly alike, and wear fewer clothes than almost any other semi-civilised people of the East: a cotton garment reaching downwards from the loins, with sometimes a scarf across the upper part of the body, usually completes the Siamese costume. Jewellery and trinkets are little used, but the teeth of married women are always stained black. They are nearly as much addicted to gambling and cockfighting as their Malay neighbours; they are also very fond of theatrical entertainments and music, in which last they display considerable skill. Their language is radically monosyllabic, and cognate with those of the Laos Shans and Anamese; but many words have been introduced into it from the Cambojan, a polysyllabic language, and the *Pali* or sacred tongue, which last the common dialect imitates in the form of its written characters.

As in other Asiatic countries slavery is common, and some chiefs have hundreds or even thousands of slaves. Some of the conquered districts have been almost depopulated, to bring their inhabs. to Siam, and at all times an active slave-trade is carried on along the Birman frontier. Persons are sold into slavery for debt, and men may sell their wives and children at pleasure. A common custom is for the master not to support his slave, but to allow the latter to work for himself for two or three months, to supply necessaries for the rest of the year. Children inherit their parents' bondage.

History.—The Siamese are said to possess records which go back for 1,000 years; but little in their accounts possesses any interest till 1511, when the first intercourse of Europeans with Siam took place. The Portuguese and Dutch had traded with the Siamese for the best part of a century, when the first British ship went up the Me-nam in 1612. In 1683, Constantine Phaulcon, a Cephelonian Greek, had found means to get himself raised to the dignity of foreign

an envoy (the celebrated M. de la Loubère, who gave an excellent description of the country) to Siam in 1685. The French were, however, expelled the country in 1690; since which time numerous wars, either aggressive or defensive, with the surrounding states, have been the most conspicuous events of Siamese history.

SIBERIA, a vast territory of N. Asia, belonging to Russia, which see; and, also, the article **ASIA**.

SIBKIM, or **SIKKIM**, a state of N. Hindostan, tributary to the British, between the 26th and 28th degs. N. lat., and about the 88th E. long., having N. Thibet, E. Bootan, W. Nepal, and S. the Bengal territory. Area, about 4,100 sq. m. Pop. estimated at about 166,000. From its situation on the S. slope of the Himalaya, its geography and products are nearly similar to those of Bootan and Nepal. It was placed under British protection in 1816.

SICILY (an. *Sicilia*), the largest, finest, most important, and most celebrated island of the Mediterranean, constituting a portion of the kingdom of Italy, between lat. $36^{\circ} 38'$ and $38^{\circ} 18'$ N., and long. $12^{\circ} 20'$ and $15^{\circ} 40'$ E. It is separated from the S. extremity of Italy by the narrow Strait of Messina, only 2 m. across, and from Cape Bon in Africa by a channel 85 m. in width. It is of a triangular shape, and was hence, in antiquity, sometimes called *Triquetra*, but more commonly *Trinacria*, from its terminating in the three promontories of Boeo (an. *Lilybæum*), Passaro (an. *Pachynum*), and Faro (an. *Pelorum*). It seems to have derived its usual name of *Sicilia* from the Sicani or Siculi, its earliest inhab. Length, E. and W., about 215 m.; greatest breadth, 150 m. Area, 10,510 sq. m. Pop. 2,302,168 in 1862.

The Neptunian or Madonian chain of mountains stretches from the Straits of Messina, at the N.E. extremity of the island, along its N. coast to Cape Boeo at its W. extremity. Some of its summits are of considerable altitude. It gives off several spurs to the S., which, with their ramifications, cover a considerable portion of the surface. But, exclusive of these, there are some mountains which are quite detached from and unconnected with any system. The principal of these is Etna, the most celebrated of European mountains, near the E. coast of the island, and by far the loftiest in Sicily, being not less than 10,872 ft. above the sea. (See **ETNA**.) There are some extensive plains: the principal is that of Catania, at the foot of Etna; the next in point of size being those of Milazzo, Terra Nova, Syracuse, and that extending along the SW. shore for about 100 m. E. of Trapani. The rivers, though generally insignificant in point of size, are mostly celebrated in classic history or poetry. The principal is the Salso (an. *Himera*), which, as well as the Platani and Belici, discharges itself on the W. coast. The Giarretta (an. *Simetus*) waters the plain of Catania. A great number of small brooks and torrents disembogue on the N. coast; but none of the rivers are navigable, or otherwise available for the purposes of trade. The only lake worth notice is that of Biveri, or Lentini, in the plain of Catania.

Except in some low and marshy tracts, the air of Sicily is generally salubrious, and the climate, though rather hot, is, for the most part, delightful. Cold weather is sometimes experienced, but the severity of the winter is never such as to affect the verdure of the country. Ice and snow are never seen except on Etna, and the highest summits of the Madonian chain, but the summer heats, especially during the prevalence of the sirocco, or S.E. wind, are often very oppressive.

The range of the thermometer throughout the year, at the level of the sea, is from about 36° to 110° Fah.; its mean height being estimated by Smyth at 62.5° , and that of the barometer at 29.80. Whilst the sun is in the northern signs, the sky, although it seldom assumes the deep blue tint of the tropics, is, nevertheless, beautifully clear and serene; but after the autumnal equinox the winds become boisterous, and the atmosphere heavy and dense; the dews and fogs increase, particularly on the coasts, and the rain falls in frequent and heavy showers. Sicily has, on various occasions, been subject to destructive earthquakes, which usually take place towards the end of winter.

The primary rocks in the mountains are principally granite, quartz, and mica. These are overlaid in many parts by limestone rocks, and most of the lower hill ranges are calcareous, abounding with metallic ores. The soil, though very various, is almost everywhere endowed with the greatest fertility, and has been famous alike in ancient and modern times for its extraordinary productiveness. Sicily was, in fact, the principal granary (*horreum*) of Rome. It is said by Livy to have been '*Populoque Romano, pace ac bello, fidelissimum annonæ subsidium*.' (Lib. xxvii. cap. 5.) And the third oration of Cicero against Verres, or that entitled *De Frumento*, affords in every part the most conclusive proofs of the fertility of this fine island, and of the great importance of the supplies of corn which it furnished to Rome. In some of the valleys the soil consists of a rich loam, from 20 to 30 ft. in depth. The decomposed volcanic products scattered over the surface of large portions of the country are also extremely fruitful, being suitable alike for the production of corn, wine and oil. Immense beds of sulphur are found in the central and S. parts of the island.

The vegetable products of Sicily embrace numerous tropical as well as European plants. The surface has been divided, according to its elevation, into the following five regions, each distinguished by its vegetation:—

| Regions | Height | | Products |
|--------------------|---------------|-------|---|
| | Ft. | Ft. | |
| 1. Sub-tropical | — to | 600 | Papyrus, Sugar-cane, Date and Dwarf Palm, Olives, Agrumi. |
| 2. Evergreen | 600— | 2,000 | Similar to those of Apennines, at same Elevation. |
| 3. Oak and Chesnut | 2,000— | 4,000 | (Mountains not so thickly wooded as in Italy.) |
| 4. Beech Wood | 4,000— | 6,000 | Maize, Wheat, to 4,500 ft. |
| 5. Upper Reg. | 6,000 & above | | Birch, Juniper. (See ETNA .) |

Sicily was believed, in antiquity, to have been the native country of corn. (Diod. Siculus, lib. v.) Homer says of its early inhabitants:—

'Untaught to plant, to turn the globe, and sow,
They all their products to free nature owe.
The soil untill'd a ready harvest yields,
With wheat and barley wave the golden fields;
Spontaneous wines from weighty clusters pour,
And Jove descends in each prolific show'r.'
Pope's *Odyssey*, lib. xi. lin. 121.

Agriculture is said to have originated in the island under the auspices of Ceres. But there are now few, if any, countries in Europe in which that art is in so degraded a state. There seems every reason to think, from the number and mar-

nitude of its cities, and other circumstances, that its population in antiquity must have been much larger than in modern times. Indeed, the fair presumption seems to be, that it must then have amounted to at least from $3\frac{1}{2}$ to 4 millions. And yet, notwithstanding this greater density of pop., it was able to export vast quantities of corn to Italy. It does not, however, appear very difficult to account for this melancholy change. After the overthrow of the Roman power, Sicily was occupied successively by the Greeks, Saracens, Normans, and French, till at length it became a dependency first of the crown of Spain, and afterwards of that of Naples. It is to this dependence, and to the introduction of the feudal system by the Normans, that its backward state is principally to be ascribed. The multiplied abuses which grew up in Spain under the reign of Ferdinand and his successors of the Austrian line, flourished with equal luxuriance in Sicily, and proved no less destructive of the industry and civilisation of its inhabs. than of those of Spain. The Neapolitan regime has been equally pernicious; and misgovernment, the abuses of the feudal system, insecurity, and unequal and arbitrary taxes have here, as everywhere else, paralysed industry and impoverished the people. But the grand curse of Sicilian, as of Sardinian industry, will probably be found in the oppressive restrictions that have been laid on the exportation of corn. Down to a late period no corn could be exported without leave being obtained from the *Real Patrimonio*, a body that pretended to take an account of the crops, and which determined whether there were to be any exportation; and in the event of its being allowed, it issued, or rather sold, licences to a few favoured individuals, authorising them to export certain specified quantities. Even had Sicily been ten times more productive than she really is, it is quite impossible that agriculture could have flourished under such discouragements. Luckily, however, these oppressive restraints have recently been abolished, and there are no longer any obstacles to the free exportation of corn.

The property of the island was valued in 1811, when the English garrison and fleet occasioned a great demand, and high prices for produce of all kinds, and this valuation has been continued to this day, as the basis on which the land and house tax (*fondiaría*) is levied. A rate of $7\frac{1}{2}$ per cent. on this valuation was first charged, which was subsequently raised to $12\frac{1}{2}$ per cent., at which it is now fixed. Though there are in Sicily a very considerable number of small proprietors, by far the greater part of the land belongs to the church and the nobility, some of whom have very extensive and valuable estates. Down to a recent period these were held under a system of strict entail, and their occupiers, as well as those on the estates of the crown and church, usually held under triennial leases, and were in a state of feudal bondage, and subject to numerous exactions on the part of their lords. Under such circumstances, even though there had been neither restrictions on exportation, nor a land-tax, the depressed condition of the peasantry, and the low state of agriculture, need not be wondered at.

But there seems no doubt that the dawn of a better day has arisen for Sicily in recent times. In 1812 and 1838 laws were passed for the abolition of the feudal system, and the complete emancipation of the peasantry; and these laws were followed up, in 1863, by another, by which in future, on the death of any individual possessed of an estate in land, and having more than one

vided in equal shares among the other children. This law, which appears to have been framed on the model of that which regulates the succession to property in France, must have nearly similar effects.

According to an official report of the year 1861, the net rental of the surface of the island is valued at about two millions and three-quarters sterling, and that of the underground at a quarter of a million. The sum total of 3,000,000 is divided in the ratios of 2, 13, 75, and 910 parts of a thousand among the crown, the communes, the church, and the landlords generally, in 699,000 lots, each averaging 4*fr* per annum. In 1811 the net rental of the country was declared by the landowners to be somewhat less than 1,000,000*l.* sterling per annum—a sum divided unequally among 2,000 families. The number of landlords among whom the surface is now divided is about 20,000, and that of mine-owners 1,000. This change of persons is owing to various measures, the principal of which are the abolition of entails, the equal division of the half of all properties, and the assignment to creditors of encumbered estates. During the last century and a half the growth of wealth in Sicily has outstripped the march of population. In 1716 the number of inhabitants was 1,200,000, and the value of property about 6,000,000*l.* sterling: in 1748 the population had risen to 1,300,000 souls, and the public wealth to 12,000,000*l.* sterling. In 1811 the number of inhabitants was 1,800,000, and the value of property 18,000,000*l.*: in 1857 the population was 2,200,000, and the amount of wealth 60,000,000*l.* Population has therefore only doubled itself, whereas the increase of wealth has been nearly tenfold; or, deducting one-third for the decreased value of gold, sevenfold in the course of 150 years.

Exclusive of wheat and barley, hemp, flax, and cotton are raised with but little labour. The culture of the last is said to be extending of late years, especially in the neighbourhood of Mazzara. It is mostly short-stapled, and but little is exported, and that only to Naples and Trieste. It is probable, however, that by attention to its culture, and the introduction of improved varieties, its quality might be improved, and it might become an article of some importance. The sugar-cane was formerly a staple product of the S. shore of Sicily. But, owing to the introduction of cheaper sugar from the W. Indies and Brazil, the culture of the cane is now restricted to some small plantations near Avola, and will probably, at no distant period, be wholly abandoned.

The district round Marsala is the principal seat of the wine culture; and, thanks to the exertions of some English capitalists established in that city, the production of wine is become an important branch of industry, and it forms a principal article of export. (See MARSALA.) Vines are generally treated as in France, being cut low, and not festooned along other trees, as in S. Italy. But, except in the English establishments, little care is in general bestowed on the vintage: the wine-press is a very rude machine, and in some districts it is altogether wanting, the process of crushing the grapes being performed in large vats, by the treading of bare-footed peasants. Along the N. coast, the mountain slopes and valleys are almost wholly covered with olive groves, though elsewhere they are rare, and do not furnish sufficient oil for the inhabs. But for the imperfections in the mode of its preparation, the oil of Sicily would be excellent. The olives, however, are permitted to hang on the tree till they come off with shaking,

oil becomes pungent and rancid, and though fit for the lamp, is totally unfit for the table. It is only near the capital, and in a few other places, that a more improved process is followed. Lemons and oranges, which grow luxuriantly, are of excellent quality, well adapted for long voyages, and, when intended for exportation, are collected with more care than any other agricultural product. They are largely exported, and are altogether highly important. Almonds, pistachios, dates, madder, the barilla plant, hazel-nuts, the *Ricinus palma*, or castor-oil plant, saffron, and tobacco, might all be raised in any quantity; but their culture is, for the most part, neglected, or ill-conducted. The mulberry is grown in the vicinity of Messina, and in the N.E. part of the island, but the produce of silk does not exceed 400,000 lbs. a year. The manna ash is grown near the capital, and manna not being monopolised by the government in Sicily, as in Naples, it might be a profitable article of trade if there were any public enterprise. Liquorice is found growing wild in several parts of the island, and considerable quantities of juice are exported. The culture of shumac is more attended to, and it forms a principal article of export. Potatoes, which have been introduced during the present century, are become a principal article in the diet of the peasantry.

The want of improved means of communication is one of the greatest drawbacks on agriculture. Recently a line of railway has been constructed from Messina to Catania, Girgenti, and Palermo; but good ordinary roads, except in the vicinity of Palermo and other great towns, are all but unknown, and the only mode of travelling is by means of the *lettiga*, a kind of fly without wheels, holding two persons, and carried like a sedan chair by two mules, one before and the other behind.

Formerly there were only certain ports from which corn could be exported, a limitation which gave rise to the establishment at these ports of public magazines, or *caricatori*, where the corn may be deposited till an opportunity occurs of shipping it off. Provided it be of good quality, and be brought in immediately after harvest, or, at farthest, in August, it is warehoused free of expense; what it gains in bulk after that period (about 5 per cent.) being sufficient to defray all expenses. The receipt of the *caricator*, or keeper of the magazine, is negotiable like a bill of exchange, and is the object of speculative purchases on the exchange at Palermo and Messina, according to the expected rise or fall in the price of corn. The depositor of a quantity sells it in such portions as he pleases, the whole being faithfully accounted for. The public magazines, in some parts of the island, are either excavations into calcareous rocks, or holes in the ground shaped like a bottle, walled up, and made water-proof, containing each about 300 salme of corn, or about 2,250 English bushels. The neck of the bottle is hermetically closed with a stone fastened with gypsum. Corn may be thus preserved for an indefinite length of time; at least it has been found in perfectly good condition after the lapse of a century.

The rearing of live stock occupies even less attention than tillage. In general, the horses, mules, and asses of Sicily are small and ill made; the mules of Modica and the asses of the Pantellarian breed being exceptions. The Tunis, or reddish-brown, and long-horned breed of cattle, are large, strong, and well formed, and there is a good breed of goats. But the sheep, excepting a few Merino flocks, are very inferior, and their wool is used only in the coarse manufacture of cloth.

Hogs are of the worst possible breed. Forests, owing to waste and mismanagement, have almost disappeared, except on the flanks of Etna and on some of the N. mountains. Staves for wine casks, and ship timber, are mostly imported from other countries, and even fire-wood is scarce.

The fisheries are chiefly conducted by corporations of fishermen, or monied individuals. That at Palermo employs, during the season, from 900 to 1,000 boats, and 3,500 fishermen, and the produce is valued at from 20,000*l.* to 25,000*l.* a year. The fishermen of Palermo belong to two corporations, each of which has a physician, surgeon, chaplain, and other officers, who are paid from a fund raised by a subscription from each member, of about 3 per cent. on his share of the produce. This fund is also applied to the relief of members and other general purposes. Tunnies, the fish principally caught on the Sicilian coasts, are taken as in other parts of Southern Italy. This valuable fish, which was in great request in antiquity, as well as in modern times, is of large dimensions, being generally from 4 to 8 ft. in length, with a nearly equal girth. Its flesh is highly nutritious. The shoals of tunny enter the Mediterranean early in the year. The *tonnare*, or fishing establishments, on the Sicilian coasts, are more extensive and valuable than those in any other part of the Mediterranean. The nets belonging to the one in the Bay of Palermo are so very strong as to be able to arrest the progress of a ship when under sail. The fishery of the sword-fish is confined chiefly to the Straits of Messina, and the anchovy and pilchard fisheries to Siculania. Lentini has some trade in *botarga*, made of the roe of the mullet. The coral fishery, near Bona, in Africa, is principally frequented by fishermen from Trapani, at which city the coral is polished, and brought for exportation to Catania, Naples, and Leghorn.

The minerals of Sicily are important and valuable. Sulphur ranks first; it is found in great quantities imbedded in blue marl, or in gypsum and limestone, over most of the central and S. parts of the island. The sulphur mines have been wrought for upwards of 300 years; but it is only since 1820 that any extraordinary quantity has been prepared for exportation. Subsequently to 1833, the trade with this country increased so much that the export of sulphur to the United Kingdom rose from 19,122 tons in the above year to 38,654 tons in 1838. In the latter year, however, the Neapolitan government granted to a French company the monopoly of the trade in sulphur, the production of which was to be limited to 600,000 quintals, to be supplied to the company by the proprietors of the mines at certain fixed prices, on condition of the latter paying to the government a bonus of 400,000 Neapolitan ducats a year. It is needless to dwell on the impolicy and absurdity of such a project. Instead of attempting to limit the export of sulphur, government should have given it every possible facility; and taking the export, under a free system, at only 1,500,000 quintals, it would have yielded, at the low duty of 2*s.* a cwt. on export, a larger sum than was to be paid by the company for their monopoly. Luckily, however, a firm remonstrance by England occasioned the suppression of the monopoly, and the duty on its export having been wholly repealed in 1846, the shipments are now very extensive. Some sulphur mines are wrought by English speculators with machinery brought from England, and workmen from Wales, Cornwall, and Scotland; but in most of the other mines the processes are rude, and, in melting, a great

to the destruction of the surrounding vegetation. Sicily furnishes saltpetre of excellent quality, in sufficient quantity for her own consumption, but, from want of enterprise, none is produced for exportation. Rock salt, bitumen, gypsum, and marble of different kinds are found in various places; and good salt is made at Trapani and other coast towns. There are also ores of copper, lead, mercury, and iron; but very few of these are wrought. There are no iron foundries in the island; and iron and tin goods are principally imported from England, lead from Spain, and steel from Germany.

In some of the principal cities there are a few manufactures of silk, woollen, cotton, and linen stuffs, the cotton and woollen yarn being imported from Naples and Salerno. A successful attempt has of late been made at Trapani to spin low nos. of cotton twist by steam power; and some progress is making, both at Palermo and Messina, in the manufacture of ordinary printed muslins and such like articles. At Palermo there are also oil-cloth and glass factories. But both glass and oil-cloth, with cotton and coarse woollen goods, India handkerchiefs, crapes, and earthenware are principally supplied by England; fine woollens, printed cottons, and silk goods come from France and Belgium; Germany and Holland send the principal part of the linen goods; paper and Swiss goods are imported from Genoa; and dye woods and colonial products come direct from America.

The subjoined table shows the total value of the imports and exports of the island of Sicily, from and to various countries, in each of the years 1862 and 1863:—

| Countries | 1862 | | 1863 | |
|---|-----------|-----------|-----------|-----------|
| | Imports | Exports | Imports | Exports |
| | £ | £ | £ | £ |
| United States | 239,200 | 302,698 | 25,018 | 321,008 |
| On the Baltic, Belgium, and Germany | 339,197 | 399,492 | 172,443 | 450,450 |
| France | 761,363 | 452,648 | 499,819 | 527,398 |
| Great Britain and Colonies | 965,386 | 1,151,177 | 749,460 | 858,063 |
| Italian States | 399,354 | 372,998 | 111,556 | 401,506 |
| Other Countries | 563,179 | 172,941 | 175,328 | 144,380 |
| Total | 3,267,679 | 2,851,954 | 1,733,624 | 2,702,805 |

Accounts are kept in ducats=3s. 5²d. of 10 tarini; the tari=4¹d., equivalent to 10 bajocchi, of 2 grani and 8 piccioli each. The oncia of 30 tarini=10s. 3d. The lb=7 lb. Eng.; the salma of wheat, &c.=7½ Eng. bushels. The palmo=10 inches 3 lines Eng.; the braccio=3 palmi; the canna=8 palmi.

Government.—The feudal system was introduced into Sicily by Count Roger, soon after the expulsion of the Saracens, in 1072. He also established a representative assembly, or parliament, which subsisted, notwithstanding the many changes the island has undergone, down to our own times. This assembly consisted of 3 estates, or *braccios*. The first, or *braccio ecclesiastico*, comprised 66 prelates, abbots, and other clergymen; the second, or *braccio militare*, comprised 227 nobles, among whom were 58 princes, 27 dukes, and 37 marquises, but the larger portion of the nobility had no seat in the assembly: the third, or *braccio demaniale*, comprised 43 representatives of as many free towns. The prince of Butero was hereditary president of the assembly. It is obvious, from this statement, that the nobles and clergy had an overwhelming majority in this assembly; and

of the landed property of the island made the substantial and real equal to the numerical ascendancy of those two classes, the establishment of majorats and entails, and the servitude of the peasantry, who were in the most absolute state of dependency on their lords, interested the latter in the support of abuses that opposed insurmountable obstacles to the public prosperity. No wonder, therefore, that the Sicilian parliament should have failed in producing the advantages which moderns are accustomed to ascribe to such institutions; and that it should, in fact, have become a bulwark for the defence and protection of the most oppressive and odious privileges.

The crown was quite as anxious as the burghers to limit the privileges of the *braccio militare*, provided that could be done without extending the privileges of the people in a constitutional point of view. But not daring to openly attack so powerful a body, it fell upon the device, worthy of the bigoted and imbecile government of old Spain, of ruining the industry of the country by laying restrictions on the exportation of its produce, that it might, in this way, impoverish the barons. This wretched system was acted upon during the whole of last century, and Sicily was a prey to every sort of abuse. At length, in 1812, a new constitution was established, under the auspices of Lord William Bentinck, commander of the British forces in the island. Under this constitution, which was formed on the model of that of England, the legislative power was vested in the king, and in an upper house consisting of barons and bishops, and a lower house elected by the people. Unluckily, however, Sicily was not in a condition suitable for the working of such a form of government. The upper house had every thing to lose, the lower every thing to gain; and though some members of the former saw the expediency or rather necessity of yielding up injurious privileges and making timely reforms, the far greater number were firmly opposed to all innovation. Under such circumstances no improvements could be effected; and the constitution becoming unpopular with all parties, the crown had little difficulty in effecting its abolition in 1816, and in establishing a nearly arbitrary system of government. Since then, and up to the year 1860, when Sicily became annexed to the new kingdom of Italy, the administration of Sicily remained assimilated to that of Naples.

The Roman Catholic is the established religion, but others are tolerated. There are about 58,000 Greeks in the island, chiefly living in the *Piana dei Greci*, near Palermo, and a few thousand Jews. There are 3 archbishoprics, those of Palermo, Messina, and Monreale; 10 bishoprics, and priests in all the communes. The church is chiefly maintained by revenues derived from landed estates. There are numerous monasteries; and the education of the lower classes is almost wholly in the hands of the clergy. Palermo and Catania have flourishing universities, both of which have had many distinguished individuals among their professors: there are colleges and academies in 21 towns, and primary and secondary schools in each commune. In these popular schools, besides reading, writing, and arithmetic, the pupils are taught linear drawing and the geography of Sicily. In the prov. of Catania the method of mutual instruction has been adopted. There are several Jesuits' schools, 3 episcopal academies for divinity students, and boarding schools for the nobility at Palermo. Females are usually educated in convents till they are 18 or 20 years of age. Some scientific journals are published, especially at Catania, a city distin-

its inhabs. Sicily has numerous hospitals and other public institutions, but they are said to be generally ill-conducted. In most large towns there is a *monte-di-pieta*, or government pawn-bank.

Each intendancy is under the control of a prefect, with a council and secretary; and each district under a sub-intendant, council, and secretary. The head board of police for the island, which sat at Palermo, has been dissolved, and the intendants and sub-intendants now communicate directly with the Italian ministry. Each community is under a syndic elected by the inhabitants from among their number. In each commune, and every quarter of the principal cities, there is a *conciliatore* nominated by the government on the recommendation of the inhabs., who gives summary decisions in disputed matters not exceeding the value of 6 ducats; a judge for each *circondario* resides in every principal town, and each intendancy has a civil tribunal with a president, three judges, an attorney-general, and a chancellor; and a superior criminal tribunal. The superior courts in the intendancies of Palermo, Catania, and Messina are at once civil and criminal tribunals, and have six judges each. That at Palermo has the supreme jurisdiction throughout the island.

Inhabitants.—The Sicilians are of middle stature, well made, with dark eyes and coarse black hair; their features are better than their complexions; and they attain maturity and begin to decline earlier than the inhabs. of more northern regions. They are cheerful, inquisitive, and fanciful, with a redundancy of unmeaning compliments, showing they are not so deficient in natural talents as in their due cultivation. Their delivery is vehement, rapid, full of action, and their gesticulation violent: the latter is so significant as almost to possess the powers of speech, and animates them with a peculiar vivacity, bordering, however, rather on conceit than wit, on farce than humour. The upper classes are incorrigibly indolent, and fond to excess of titles and other marks of distinction. This love of ostentation is so inveterate that the poorer nobility and gentry are penurious to an extreme in their domestic arrangements, and almost starve themselves to be able to appear abroad in the evening with a mean and poverty-stricken equipage. Notwithstanding the energies of the peasantry are impaired by the mildness of the climate, and the multiplied oppressions of which they are the victims, they may be said, as compared with the upper classes, to be industrious: they are also sober, but passionate, ignorant, credulous, and superstitious. They are, however, bigots rather than fanatics, and are civil and kind to such heretical strangers as may be thrown in their way. There is a great want of keeping and of comfort, even in the best houses; and in them, and everywhere, there is a want of cleanliness.

Sicily early became the seat of many flourishing Greek colonies, of which Syracuse and Agrigentum were the most celebrated. At a subsequent period it was the scene of an obstinate and lengthened contest between the Carthaginians and Romans, and became the first and most valuable acquisition made by the latter beyond the limits of Italy. After the fall of the Western empire, it was successively held by the Vandals, the Goths, and the Greek emperors, till 827, when it was overrun by the Saracens. In 1072 it was taken by the Normans, who, as already seen, established the feudal system, and kept possession of the island till the establishment of the Swabian dynasty, in 1194. In 1265 Charles of Anjou became

John of Procida, known by the name of the 'Sicilian Vespers,' 29th March, 1282, put an end to the sway of the Angevines. It soon after became a dependency of Spain, and was governed by Spanish viceroys till 1706, when a popular revolution annexed it to Austria. By the peace of Utrecht, in 1711, it was ceded to Victor Amadeus of Savoy, who, in 1720, was compelled by the emperor Charles VI. to exchange it for Sardinia. In 1734 the Austrians were driven out by the Spaniards, and the infant Don Carlos was then crowned king of the Two Sicilies. While the continental dominions of Naples were held by Napoleon, Palermo was the residence of the court, the island being defended by an English fleet and garrison. An insurrection that broke out in 1821 was speedily suppressed by the Austrians. Still, however, there was a great deal of dissatisfaction in the island, and a strong desire for a more liberal system of government. The party favourable to the independence of Sicily, taking advantage of the excitement occasioned by the French revolution of February, 1848, summoned a parliament, which, by a resolution agreed to on the 13th April, 1848, formally deposed the house of Bourbon from the throne, declaring at the same time that Sicily would form herself into a constitutional monarchy under a sovereign of her own choice. Conformably to this declaration, the throne was subsequently offered to the Duke of Genoa, second son of the King of Sardinia. But the Sicilians lacked the courage and ability to defend the new order of things, and for a while were again brought by force under the rule of the Neapolitan Bourbons. Sicily finally liberated itself from this yoke in 1860. On the 1st of October of this year, General Garibaldi, at the head of a small body of insurgents, defeated the royalist army, 30,000 men strong, at the Volturno, and soon after the whole of the island was freed, and annexed to the kingdom of Italy.

SIDMOUTH, a sea-port, market town, and par. of England, co. Devon, hund. E. Budleigh, on the Sid, at its mouth in the English Channel, 13½ m. ESE. Exeter. Area of par. 1,970 acres. Pop. of par. 3,354, and of town, 2,572 in 1861. The town is situated between two steep ranges of hills, which enclose it on every side except the S., where it is open to the sea. From its sheltered situation, freedom from fogs, and the beauty of its surrounding scenery, Sidmouth has long been a favourite watering-place, and was frequently visited by George III., his queen, and court. The port was formerly of some consequence, but being choked up by sand, it is now accessible only by small vessels. The sands, however, have contributed to its popularity as a bathing-place; and it has a handsome promenade on the beach, warm baths, good assembly, reading, and billiard rooms, and the other establishments usual at such places for the accommodation of visitors. The parish church, an ancient building, belonged, in the thirteenth century, to St. Michael's monastery in Normandy; it contains a monument to Dr. Currie of Liverpool, the first biographer of Burns. There are Baptist, Independent, and Unitarian chapels, a national school, several charities for the relief of the poor, and a theatre. Petty sessions for this and the neighbouring pars. are held monthly at Sidmouth; and courts leet and baron, at which the peace-officers are chosen, are held annually. Sidmouth gives the title of viscount to the Addington family. Markets on Saturdays. Fairs, Easter Monday and Tuesday, and third Monday in Sept., for cattle.

SIENA, or **SIENNA** (an. *Sena Julia*), a city

three small hills, between two tributaries of the Ombrone, 30 m. S. by E. Florence, on the railway from Florence to Rome. Pop. 22,624 in 1862. The neighbouring country is rugged and naked; but the city itself is embosomed in trees, and entered by a fine avenue, which gives it an agreeable and imposing appearance from without. Its streets, however, are narrow, steep, and uneven; and its houses, though often dignified with the title of palaces, are built of brick, and are nowise remarkable for their architecture. The inhabitants are active, intelligent, and industrious. The principal public building is the cathedral, a vast, and, on the whole, magnificent Gothic edifice, founded in the thirteenth century, though not wholly of one date, and built in alternate courses of black and white marble. Over the arches supporting the nave is a series of the heads of popes; and the pavement is a kind of mosaic-work, much of which is very beautiful. The sacristy is adorned with a history of Pope Pius II., partly painted by Raphael at a very early age, and partly from his designs; and in the same room is a most beautiful antique group of the Three Graces. Under this building is a subterranean church, which, if the cathedral, as is affirmed, stand on the site of a temple of Minerva, is most probably of remote antiquity. The churches of St. Dominico and St. Catherine, the hospital, city hall, and theatre, are worth notice. The city hall is in the great piazza, a sloping semicircular space, laid out in walks, ornamented with statues, and forming the principal lounge of the inhabitants. The citadel, facing the main street, has an esplanade and ramparts, planted with trees, which also form favourite public walks. The antiquities include a Roman gate, the remains of ancient walls, and it has a fountain celebrated in Dante's 'Inferno,' and several good public and private galleries of paintings.

Sienna has some reputation as a seat of learning. Its university, founded in 1330, has a library of 25,000 vols., and about twenty professors. Its importance has greatly declined; but it is still celebrated as a school of medicine, and may have about 800 pupils. It has, also, an ecclesiastical and several other seminaries, and various academies and learned societies, among which last are the *Rozzi* and *Intronati*, considered the oldest establishments of their kind in Europe. The Siennese pique themselves on speaking the Tuscan language in its greatest purity.

Sienna, which is an archbishop's see, has about forty woollen factories, besides manufactures of hats, paper, and leather. Its chief trade is, however, in corn and other agricultural produce, and the marble of its vicinity. Augustus sent thither a Roman colony, previously to which this city appears to have been insignificant, though boasting of very high antiquity. In the middle ages it was, like Pisa and Florence, the cap. of a republic, constantly at war with its neighbours; and it was generally flourishing and independent, till Philip II. of Spain took and conferred it, with its territory, on Cosmo I. of Florence. The French took it in 1808; and, previously to 1814, it was the cap. of the d^{ép.} of Ombrone. No fewer than seven popes, including Pius II., Gregory VII., and Alexander III., with Socinus, and other eminent individuals, have been natives of Sienna.

SIERRA LEONE, a colonial establishment of Great Britain, on the W. coast of Africa, consisting of a peninsula, about 25 m. in length N. and S., washed by the Atlantic on the NW. and S., and partially bounded on the E. by a bay formed by the Sierra Leone river. Free Town, the cap., on the N. shore of the peninsula, is in lat. 8° 29' 40"

41,806, only 131 of whom—100 males and 31 females—were Europeans. The peninsula consists principally of a range of conical mountains, from 2,000 to 3,000 ft. in height, surrounded by a belt of level ground, from 1 to 5 m. in breadth. This is probably the most unhealthy situation in which Europeans have ever attempted to establish a settlement. The principal characteristic of the climate is its extreme humidity. There are two seasons, the wet and the dry. At Sierra Leone and the Isles de Loss, the former extends from May to Nov., and at the Gambia from June to Sept. or Oct., and is always ushered in and carried off by tornadoes. Nothing can exceed the gloominess of the weather during this period: the hills are wrapped in impenetrable fogs, and the rain falls in such torrents as to preclude all exercise and amusement out of doors. At this period fevers of nearly every type, dysenteries, liver complaints, and other diseases, usually make their appearance; though they are so prevalent at all times that they can scarcely be said to belong exclusively to any season.

The colony was founded in 1787, partly as a commercial establishment, but more from mistaken and ill-considered notions of humanity. Being intended to consist principally of free blacks, who were to be instructed in the Christian religion, and in the arts of Europe, it was supposed it would become, as it were, a focus whence civilisation might be diffused among the surrounding tribes. About 1,200 free negroes who, having joined the royal standard in the American war, were obliged, at the termination of that contest, to take refuge in Nova Scotia, were conveyed thither in 1792. To these were afterwards added the Maroons from Jamaica; and, since the legal abolition of the slave trade, the negroes taken in the captured vessels, and liberated by the mixed commission courts, have been carried to the colony. But the efforts made to introduce order and industrious habits, and to lay the foundations of civilisation amongst the blacks, though prosecuted at an enormous expense of blood and treasure, have been signally unsuccessful. And this, after all, is the only result that could have been rationally anticipated. The laziness of the blacks has been loudly complained of, but without reason. Men are not industrious without a motive; and most of those motives that stimulate all classes in colder climates to engage in laborious employments, are unknown to the indolent inhabs. of this burning region, where clothing is of little importance, and all but dispensed with, where sufficient supplies of food may be obtained with comparatively little exertion, and where more than half the necessities and conveniences of Europeans would be positive incumbrances. And had it been otherwise, what progress could a colony be expected to make, into which there are annually imported thousands of liberated negroes, who, if not wholly incapable of civilisation, are, at all events, in the lowest stage of barbarism? The hopelessness of making any beneficial change in the character and condition of the blacks, by keeping up this most pestilential establishment, is now so very apparent, that it may be hoped it will be speedily abandoned.

Commercially considered, Sierra Leone appears to quite as little advantage as in other points of view. The country round the settlement consists of a vast and all but impenetrable forest, only small patches of which have been cleared and cultivated. The principal articles of export consist of teak and cam wood, with ivory, palm oil,

value is inconsiderable. The great article of export is palm oil.

The subjoined statement shows the total value of the imports and exports in the six years 1856-63.

| Years | Imports | Exports |
|-------|---------|---------|
| | £ | £ |
| 1856 | 152,907 | 180,385 |
| 1857 | 172,315 | 288,728 |
| 1858 | 139,805 | 225,349 |
| 1860 | 172,726 | 304,391 |
| 1862 | 144,269 | 268,814 |
| 1863 | 209,106 | 295,857 |

The government of Sierra Leone consisted, until May, 1863, of a governor and a legislative council, comprising the bishop of Sierra Leone, the chief justice, the colonial secretary, the collector of customs, and one or two others appointed by the crown. By a new charter issued at that date (May 27, 1863), an executive council was created, composed of four members nominated by the crown, and the legislative council was made to consist of the members of the executive council, and others appointed by the crown. The chief justice presides in the supreme court of law, held alternately in the course of the year at the different stations under his command; and there are mixed commission courts for the adjudication of vessels taken in the slave trade. The colony is subdivided into 6 districts and about 16 parishes, in each of which are one or more schools on the Lancastrian or the national system. The total public revenue, in 1863, amounted to 37,190*l.*, and the expenditure to the same sum. There was little increase in the revenue in the course of ten years previous to 1863.

Sierra Leone was ceded to Great Britain in 1787 by the native chiefs. Four years afterwards a charter was granted to a company, under the name of the 'Sierra Leone Company.' In 1800 a grant was made to the company, by letters patent, of the peninsula, and a court of directors of the company was empowered to appoint a governor and council, the former having power to enact laws: this state of things lasted 7 years, when the colony was transferred back to the crown. In 1862 a large tract of country, called Sherboro, was handed over by treaty to the colony.

SIGMARINGEN (HOHENZOLLERN), formerly one of the minor principalities of Germany, but, since 1849, united to Prussia, together with the principality of Hohenzollern-Hechingen. H.-Sigmaringen is separated into two portions by H.-Hechingen: its S. portion is watered by the Danube, and the N. by the Neckar. It has an area of 40 sq. m. Except in the S. the soil is generally poor; still, however, rather more corn is grown than is required for home consumption. Potatoes, flax, and fruits are also grown; but the chief wealth of the state consists of its timber, cattle, and hogs. The rural population is partly occupied in manufacturing cotton and linen cloths, and hardware.

Hohenzollern-Hechingen has an area of 120 sq. m. It is mostly mountainous, and cattle breeding forms the chief occupation of the inhabitants. Both the territories of Hohenzollern-Sigmaringen and H.-Hechingen were made over to Prussia in return for a life-rent to be paid to the former princes, representatives of a branch of the house of Hohenzollern, from which the kings of Prussia are descended.

Posen, E. Poland and Cracow, S. Austrian Silesia, Moravia, and Bohemia, and W. Saxony and Brandenburg. It lies between 49° 40' and 52° N. lat., and 14° 25' and 18° 12' E. long., and has an oblong shape, extending NW. and SE. about 24 m. Area, 15,711 sq. m. Pop. 3,390,804 in 1861. Principal towns, Breslau, Liegnitz, Glogau, Gorlitz, Neisse, Glatz, and Oppeln. It is divided into three regencies, and these again into 57 circles. Surface rugged and mountainous along its S. and SW. frontier, but in other parts it is either flat, or but slightly undulating; this is particularly the case on the E. side of the Oder. The river now mentioned traverses the whole length of Silesia, and being navigable for barges almost to the extreme S. limits of the province, it forms a valuable channel of communication. The other great rivers, the affluents of the Oder, are the two Neisses and the Bober on the S., and the Malapanne and Bartsch on the N. Soil various, being in many parts loamy and highly productive, and in parts marshy and sandy. Great part of the regency of Oppeln is covered by vast forests. Principal products, corn, flax, and hemp, produced in very large quantities: the stock of sheep amounts to about 2,800,000 head: wool, of a very superior quality, now forms, next to linen, the principal article of export from the province: among the other products are beet-root sugar, timber, madder, tobacco, and silk in small quantities. Silesia is rich in mineral products. Coal is found in many parts, particularly in the vicinity of Schweidnitz and Neisse. There are also valuable mines of iron, lead, zinc, and copper. Manufactures are important and valuable. Linen is the principal product; but, for some years past, it has been declining, the cotton manufacture having grown up in the interval to a considerable state of advancement. The woollens manufactured are generally coarse, but they employ a considerable number of hands. The condition of the inhabs. of this prov. has been vastly improved, both as respects their command over the necessities and conveniences of life, and their intelligence, since they became subjects of Prussia. An intelligent observer, speaking of Silesia, observes (*Germany and the Germans*, vol. i.), 'In a country where linen is a staple commodity, the majority of the men are weavers, which trade they often exercise in conjunction with their employment as agriculturists; and the women, without exception, are spinners of flax, for we frequently see the better classes pursuing their thread-making occupation, not only in the saloon but in the promenade, and the lower orders in their huts and on the high road, even while their heads are heavily laden with provisions for the market; but instead of the wheel they use the distaff, which, I was informed, was the prime cause of the superior excellence of the Silesian linen, as the thread is by this process rendered more soft, round, and less inclined to break. There is, however, a wide difference between the inhabs. of Silesia descended from German colonists and the native Slavonians, particularly those who people the districts on the frontiers of Poland. The former are industrious, cleanly, and manufacturing; while the latter are debased by ignorance, mendicancy, and superstition; they also resemble their neighbours the Poles, not only in their language, which is a species of Polish patois, but in their sheepskin jackets and greasy kappstas, neither of which are ever allowed to contaminate soap and water. Another point of similarity is their inordinate attachment to bodka, and a deep

characterises both than their humiliating mode of acknowledging a kindness, their expression of gratitude being the servile 'Upadam do nog' (I fall at your feet); which is no figure of speech, for they will literally throw themselves down and kiss your feet for the trifling donation of a few halfpence. How abject is the state to which feudal vassalage and superstition have reduced this people.

SILISTRIA (Turk. *Distra*), a fortified city of European Turkey, prov. Bulgaria, cap. sanjak, on the Danube, 63 m. ENE. Rustchuk. Pop. estim. at 20,000. The town is ill-laid out, and many of the houses are in ruins. The citadel, several mosques and public baths, and a large bonding-warehouse and custom-house are the chief buildings. The inhabitants exchange timber and cattle with the Wallachians for salt and hemp; but their trade is not of much consequence. Near the city are the remains of some fortifications thrown up during the Byzantine empire.

SIMBIRSK, a government of European Russia, on both sides the Wolga, having N. the government of Kasan, E. Orenbourg, S. Saratoff, and W. Penza and Nijegorod. Area, 28,000 sq. m. Pop. 1,140,978 in 1858. It consists of a gently undulating plain, having a black and generally very fertile soil. Besides the Wolga, it is watered by the Sura and other affluents of the former. Climate in extremes, the summer being hot, and the winter cold. The Wolga is annually frozen over for about five months. Rye, wheat, and other grain are raised in quantities more than sufficient for the consumption. Hemp is largely cultivated, with flax, tobacco, and poppies. Except among the Kalmucks, the rearing of cattle is not much attended to. In the N. forests are abundant. Distilleries numerous; and, besides the coarse goods manufactured by the peasants, there are establishments for the manufacture of cloth, coarse linen and canvass, and coverlets, with glass-works, soap and candle-works.

SIMBIRSK, the capital of the above government, on the Wolga, on an isthmus between it and the Sviaga, lat. $54^{\circ} 18' 49''$ N., long. $48^{\circ} 22' 15''$ E. Pop. 28,275 in 1858. The town stands partly on an eminence, which commands a fine view, and partly on a plain. Streets broad and straight; houses mostly of wood, but neat and commodious inside. There are numerous churches, which, with one exception, are all of stone, and two convents. The town is in a fertile country; and, besides large quantities of corn, exports the produce of the fisheries on the Wolga. It is a good deal resorted to by the surrounding nobility.

SIMPHEROPOL, or **AKMETCHET**, a town of European Russia, in the Crimea, of which it is the capital, 40 m. NE. Sevastopol. Pop. 5,980 in 1858. The town stands in a fine but not very healthy situation on the river Salghir, and consists of two parts, one new, built by the Russians, in the European style, the other, old and occupied by the Tartars. The streets in the former are wide and regular, and it contains the government offices and a cathedral. Within the last few years some improvements have been made in the Tartar part of the town, but the streets continue to be narrow, crooked, and filthy, and it has a mean, miserable appearance.

The celebrated traveller and naturalist Pallas lived for fifteen years in this town. It was his own wish to emigrate thither; and to enable him to gratify it, the empress Catherine II. made him a present of an estate in the best part of the peninsula. But being cut off from the society he

country and with the climate he had so highly panegyrised. Having sold his estate, he left Simpheropol in disgust in 1811, and returned, after an absence of forty-two years, to his native city Berlin, where he died in the course of the same year.

SIMPLON, a celebrated pass over the Alps, where a magnificent road was constructed by order of Napoleon, establishing an easy carriage communication between Geneva and Berne, in Switzerland and Milan. See **ALPS**.

SINAI (MOUNT), a mountain of Arabia, near the Gulf of Suez, or upper part of the Red Sea, famous for its connection with some of the most memorable events of sacred history. It is generally supposed to be identical with the mountain called by the Arabs *Djibbel Mousa*, or Mountain of Moses, or simply *El Tor*, the Mountain, in the peninsula between the Gulfs of Suez and Akaba, in about lat. $28^{\circ} 25'$ N., long. $34^{\circ} 10'$ E. The group of mountains to which Sinai belongs, and which also includes Mount Horeb, Mount St. Catherine, and other remarkable summits, is surrounded on all sides by deserts occupied only by tribes of Bedouins, or wandering Arabs. The mountains are penetrated by deep chasms, edged by bare perpendicular ledges of rock; and the whole has a singularly wild and sterile appearance.

The convent of St. Catherine, founded by the emperor Justinian, in a valley on the slope of the mountain, is the halting-place whence pilgrims set out to ascend to the summit. Being exposed to the attacks of the Arabs, it looks more like a fortress than a convent. It is an irregular quadrangular edifice, surrounded by high and solid walls, and covers a considerable extent of ground. To prevent being surprised by their troublesome neighbours, the entrance gate, which is rarely opened, is built up; and on ordinary occasions all access to the convent is by an entrance about 30 feet from the ground, to which travellers, provisions, &c., are raised in a basket made fast to a rope, pulled up by a windlass. The interior of the convent presents little remarkable, all the apartments and chapels being built of rough stone, without symmetry or order, communicating by crooked and dark passages. The Church of the Transfiguration alone possesses any pretension to magnificence. It is 80 ft. in length and 58 in breadth, paved with marble, adorned with a variety of figures. The event to which it relates is represented in mosaic. But the grand treasure of this church, and that which is supposed by zealous Catholics to confer on it peculiar sanctity and importance, is the possession of the relics of St. Catherine, borne by angels to the neighbouring mountain, which still bears her name, and subsequently collected and deposited in a marble sarcophagus in this building! The skeleton of the hand, covered with rings and jewels, is the only portion of the remains of the saint that is exhibited to her faithful votaries.

Mount Sinai, as every one knows, is almost as famous in the sacred history of the Mohammedans as of the Jews; and it is a curious fact, that there is a Mohammedan mosque within the precincts of this convent. It has also an excellent garden at a little distance, which is reached by a subterranean passage, secured by iron gates. It produces fruits, plants, and vegetables, in the utmost profusion. The climate is temperate, in consequence of the elevation; and snow even falls in winter.

The ascent to the mountain, which lies through

been greatly facilitated by rude steps cut in the rock. At the height of about 500 ft. from the convent is a spring of fresh and cold water, covered by a rock, which protects it from the sun and rain. After ascending a little higher, the traveller gains the summit of Mount Horeb, which forms, to use the expression of Laborde, a kind of breast from which Sinai rises. 'Continuing our route from this halting-place by a path, still more rugged and steep than before, we arrived in about 45 minutes at the summit of Sinai, the apex of a peak not more than 50 yards across at its widest part.' (Wellsted, ii. 95.)

The height of Mount Sinai has been variously estimated, but, according to observations taken by Mr. Wellsted, it may be estimated at about 7,500 ft. above the level of the sea, and about 2,500 ft. above the convent of St. Catherine.

On the summit of the mountain is a dilapidated church, which tradition represents as founded on the spot where, amid thunder and lightning, and the smoke of the agitated mountain, Moses received the Decalogue from the hands of the Almighty. (Exodus, cap. xx.) Truth, however, is seldom unaccompanied with error; and but a few yards distant from the church are the ruins of a mosque: this mountain, by a singular coincidence, being hallowed alike in the estimation of Jews, Christians, and Mohammedans.

'It seems,' says Sir Frederick Henniker, 'to a person on the summit of Sinai as if the whole of Arabia Petraea had once been an ocean of lava, and that, while its waves were literally running mountains high, it had suddenly been commanded to stand still.' Mount Sinai itself, Mount St. Catherine, which is still higher, and the adjacent mountains, rise in sharp, conical, granite peaks; and from their steep and shattered sides huge masses have been thrown down. The prospect from the summit of Sinai is most extensive; the Gulf of Akaba on the one hand, and that of Suez on the other, with Mount Agrib, on the Egyptian coast, are distinctly visible. Barrenness and desolation are, however, its grand characteristics. 'No villages and castles, as in Europe, here animate the picture; no forests, lakes, or falls of water, break the silence and monotony of the scene. All has the appearance of a vast and desolate wilderness, either grey, darkly brown, or wholly black.' (Wellsted, ii. 98.) But it is the associations connected with the mountain, and the astonishing events of which it is believed to have been the theatre, that inspire those feelings of awe and veneration felt by all who have either beheld or ascended Mount Sinai.

Considerable doubts have, however, been entertained, whether the mountain now described be really the Mount Sinai of the Pentateuch. It might be expected that the summit of the mountain should exhibit some traces of the stupendous phenomena that are said to have accompanied the manifestation of the Divine presence. But, according to Burekhardt, neither Sinai, nor any of the adjoining summits, exhibits any traces of volcanic action. It is supposed by some that the *Djibbel Katerin*, or Mount St. Catherine, has the best title to be regarded as the true Sinai.

SINDE, an extensive country of NW. India, between Hindostan and Beloochistan, comprising the lower course and delta of the Indus; extending between lat. 23° and 29° N., and long. 66° and 72° E.; having N. the Punjab and Bahawalpoor territories, E. Rajpootana, S. the Runn of Cutch and the Indian Ocean, and W. Beloochistan and Cutch-Gundava. Its length, N. to S., is about 380 m.; its breadth is very variable; but

about 1,000,000. The various products of Sinde differ little from those of the rest of India. Rice, indigo, tobacco, and sugar-cane are among the principal; vines, figs, pomegranates, and even apples, are successfully raised at Tatta; and wheat, barley, and the common Indian grains are grown to great perfection in Lower Sinde. There are vast herds of horned cattle and sheep, which are generally larger than those of Hindostan. Camels and buffaloes are numerous. Game is very plentiful, though wood is scarce. Salt and saltpetre effloresce almost everywhere on the soil.

The main exports are salt, rice, ghee, hides, saltpetre, cotton, oil, sharks' fins, bark for tanning, with assafoetida and other gums; Cashmere shawls, saffron, horses, leather, musk, alum, and various drugs and gems from the countries on the N. and W. The principal imports from India are metals, ivory, tea, tutenague, and other China wares, chintzes, broad cloths, arms, and other Indian and European manufactures; but particularly opium, in transit from Malwah to Bombay. From Persia and Arabia the Sindians also obtain silks, swords, carpets, dates, rose-water, and coffee. Nearly all the trade centres in Kurachee on the Beloochistan border; there is little commerce anywhere else, even on the Indus. The chief towns are Tatta, Hyderabad, Kurachee, Kyrpoor, Shikarpore, and Larkham.

The Sindians are of a middle size, slim, and darker than most of the inhabs. of Hindostan. Most of them are Mohammedans of the Shiah sect. There is little to praise in their character; they have nearly all the worst vices of an enslaved people. They are, however, brave in the field, and, unlike other Asiatics, pride themselves on being foot soldiers, preferring, also, the sword to the matchlock. Previously to its annexation to the British territory, Sinde was governed by ameers, or military chiefs. A British residency was established amongst them, which, after the disasters in Affghanistan, they had the temerity to attack. This led to hostilities, in which the ameers were signally defeated by Sir C. Napier in the well-contested actions of Meeanee and Hyderabad. The country was finally annexed to the Bombay presidency in 1843.

SINGAPORE, a settlement belonging to Great Britain, in SE. Asia, consisting of a small island at the S. extremity of the Malay peninsula, incl. the town of the same name, the latter being in lat. 1° 17' N., long. 103° 50' E. The island is of an elliptical form: greatest length, E. and W., about 27 m.; average breadth, 11 m. Area, 275 sq. m. Pop. 81,792 in 1860. In 1836, the pop. was 29,984. The island is separated from the main land by a strait, which, though scarcely $\frac{1}{2}$ m. in breadth, in its narrowest part, was the route usually followed by ships between India and China in the early stages of European navigation. But the grand commercial highway between the E. and W. portions of maritime Asia now passes along the S. side of Singapore, between it and a chain of desert islands about 9 m. distant; the safest and most convenient track being so near to Singapore that ships, in passing and repassing, approach close to the roads. The town is wholly indebted for its rapid rise and growing importance to its position on this strait. This has rendered it not merely a convenient entrepôt for the trade between the Western world and India on the one hand, and China on the other; but also for that between the former and the Eastern Archipelago and the Philippines.

The surface of the island is low and undulating in some parts, rising into rounded hills, covered with

height. It consists principally of laterite resting on sandstone: its N. and E. portions are, however, of granite. It abounds with iron ore; but this is the only metallic product hitherto discovered, though, from the great abundance of tin in the neighbouring countries, it probably exists here also. The climate is hot, with but little variation of temperature: the thermometer usually ranges from 71° to 89° Fahr. The total annual fall of rain is about 100 inches; the monsoons are little felt; but the island is kept in a perpetual state of verdure by frequent showers. The summits of the hills are generally sterile; but on their slopes and in the intervening valleys there is occasionally a good deal of fertile soil. Gambier, or catechu, and fine tropical fruits and vegetables are grown in tolerable quantities. Nutmegs, coffee, and pepper have succeeded. Cloves have wholly failed; and the settlement depends for rice on Java, Bengal, and Sumatra, and for pigs, poultry, and cattle, on Malacca. Down to 1837, when they were in part remodelled, the regulations as to land were great obstructions to the clearing, cultivation, and prosperity of the island.

The absence of the elephant and tiger, and other formidable wild animals, and of the swarms of insects common in warm climates, are circumstances favourable alike to agriculture and the comfort of the inhabs. The only quadrupeds are some small species of deer, the otter, porcupine, and a few others; but it has a great variety of birds and reptiles. Tripang, and *agar-agar*, a delicate fern-like sea-weed, are furnished in great abundance by the neighbouring coral reefs and shoals.

A few manufactures, including that of pearl sago, agricultural implements and arms, are carried on principally by the Chinese. But the entire importance of Singapore consists in its being an emporium for the commerce of the adjacent countries, and of that between Eastern and Western Asia.

The chief imports are cotton and woollen goods, iron, and spelter from Great Britain; opium, Indian piece-goods, and canvass bags from Calcutta; ebony and cloves from the Mauritius; Banca tin, coffee, and spices from the Dutch settlements; raw silk, cassia, tea, camphor, and nankeens from China; mother-of-pearl, sugar, rice, oil, bullion, and some Chinese goods from the Philippines; nearly the same articles from Siam and Cochin China; and rice, oil, sapan wood, tortoiseshell, birds, and feathers, camphor, spices, antimony ore, benjamin, catechu, and eagle wood from the various islands of the E. Archipelago. But a small portion only of these goods is imported for the consumption of the island. The latter, in fact, is essentially an entrepôt, the goods brought to it being mostly shipped again for other places. Thus, opium, birds' nests, and biche de mer go to China; cotton, pepper, raw silk, and tin to Europe, or rather to England; British piece-goods and woollens to Manilla, China, Rhio, Siam, Borneo, and Celebes; cotton twist to the same countries; arms to Borneo and Rhio; glass and iron wares to Manilla, China, Sumatra, and Java.

The principal merchants and agents are Englishmen; but some, also, are Chinese, who comprise the bulk of the shopkeepers, with by far the most valuable part of the labouring pop. The European merchants transact business on their own account; but the principal part of their employment consists in acting as agents for houses in London, Liverpool, Amsterdam, Batavia, Canton, and the capitals of British India. The language of commercial intercourse is generally Malay. Merchants' accounts are kept in Spanish dollars,

piculs; the bunkal (for gold-dust) = 832 gr. troy; the bag of rice = 2 Beng. maunds, &c.

Singapore, which is said to have been the earliest place settled by the Malays emigrating from Sumatra, and an ancient seat of considerable trade, was purchased of the Sultan of Johore by the E. I. Comp. in 1819. It was then an inconsiderable village; but Sir Stamford Raffles, who recommended the purchase, clearly appreciated the advantages of its situation for a commercial entrepôt, and the importance of its occupation. It was placed at first under a resident, but had no organised government for several years afterwards. Mr. Crawford, author of the able work on the Eastern Archipelago, was governor of Singapore from 1823 to 1826. The governor is now assisted by a council of several salaried officers, and a recorder's court has been established. The military force consists of a wing of the Madras native regiment, and a small detachment of artillery. The public revenue is derived from an excise on the consumption of pork, opium, and home-made spirits, government rents, dues, and fines.

The town of Singapore is situated on the S. side of the island, on both banks of the rivulet or salt creek of its own name, stretching thence E. for about 1½ m. to another small creek of the same kind. Its central part is occupied with the dwellings of the merchants and the military cantonments; the Malay quarter is at the E., and the principal Chinese and commercial quarter at the W. extremity, on the right bank of the rivulet, crossed by a wooden bridge. The streets are in general regularly laid out, and the houses superior to those of Penang, though the best are only of brick. On a hill N. of the town is the government house; the other principal buildings are the court-house, gaol, new custom-house, missionary chapel, Armenian church, and the Singapore Institution, founded by Sir S. Raffles, for the cultivation of the languages of China, Siam, and the islands of the Malay archipelago. At present it has an English, a Malay, and a Tamul school, and about 70 pupils: it receives a small pension from government, but is principally dependent on subscription. Ships lie in the roads, or outer harbour, at from 1 to 2 m. from town. The assistance of a number of convenient lighters, which are always in readiness, enables ships to load or unload with scarcely any interruption throughout the year; and the creek being accessible to the lighters for three-fourths of a mile inland, the goods are taken in and discharged at convenient quays before the principal warehouses.

On a small island, about 60 m. S.E. Singapore, is the Dutch settlement of Rhio, the seat of a Dutch resident, with about 24,000 inhabs. It was originally settled in 1785, and colonised a second time by the Dutch in 1818; but its trade has been almost wholly superseded by that of Singapore.

SINIGAGLIA, or SENEGAGLIA (an. *Sena Gallica*), a town of Central Italy, prov. Ancona, on the Misa, about ½ m. from its mouth, in the Adriatic, 17 m. WNW. Ancona. Pop. 23,498 in 1862. The town is regularly, though not strongly, fortified with a mound and bastions, and the gates are handsome. Its cathedral, of the Corinthian order, in the form of a Greek cross, has some good paintings, but nothing else remarkable. The streets are broad, and the town has a neat appearance; but it is indifferently supplied with water, and is said not to be very healthy.

Sinigaglia is the seat of the greatest of the Italian fairs. The fair commences on the 14th of July, and should terminate on the last day of that

are extremely moderate, and every thing is done to promote the convenience of those frequenting it. All sorts of cotton and woollen goods, lace, iron, and steel, hardware, jewellery, brandy and liqueurs, raw and refined sugar, dried fish, cacao, coffee, and spices are brought thither by English, French, Austrian, American, and Swiss dealers. These are exchanged for the various raw and manufactured products of Italy and the Levant: consisting, among others, of raw, thrown, and wrought silk, oil, fruits, cheese, alum, soda, sumach, and sulphur. The value of the imports at some recent fairs has been estimated at about 2,000,000*l.* Accounts are kept in scudi of 20 soldi; the scudo = 4*s.* 4*d.* very nearly; 100 lbs. Sinigaglia = 73½ lbs. avoirdupois. The ell, or braccio, measures 25·33 English inches.

The port belonging to the town, at the river's mouth, is fit only for small vessels. Sinigaglia is a bishop's see. According to Polybius, it was colonised by the Romans, A. U. C. 471. Having espoused the cause of Marius, it was taken and sacked by Pompey.

SINOPE, the Sinoub of the Turks, a town of Asia Minor, on the S. coast of the Black Sea, lat. 42° 2' 30" N., long. 35° 9' 45" E. Pop. estimated at 10,500. Sinope is situated on a low narrow isthmus, connecting the rocky promontory terminating in Cape Bozdepeh, or Ada, with the main land. Its port, which is the best on this coast, on the S. side of the town, is protected from the N. and NE. gales by the isthmus and promontory already mentioned, and is defended by batteries and by a castle, constructed during the lower empire. Ships anchor within ½ m. of the town, in from 18 to 17 fathoms, or nearer to it, in from 5 to 7 fathoms. There is a roadstead on the N. side of the isthmus, but it is open and exposed. Sinope has a naval arsenal and a building-yard, the only one in Turkey except that at Constantinople. The oak cut on the neighbouring mountains is of excellent quality, and the ships built here are reckoned the best in the Turkish navy. The situation of the town is such that it might easily be fortified so as to be made a place of great strength; but the fortifications at present existing are quite incapable of affording any effectual protection either to the town or the shipping in the port. This was strikingly exemplified in the latter part of 1853, when a Russian squadron attacked, and, without any material loss to itself, totally destroyed six Turkish frigates with several transports at anchor in the roads. Being about half-way between Constantinople and Trebizond, and occupying an advanced position on the southern shore of the Euxine, Sinope is, in a military and naval point of view, of great importance. Its trade is inconsiderable. The principal exports are timber, salt, cordage, fish, oil, and leeches.

Should civilisation and the arts once more revive in the ancient Pontus, and the other countries to the S. of the Black Sea, the excellence of its port could not fail to restore to Sinope some portion of its former grandeur. Even now a considerable intercourse is beginning to take place with the countries E. and S. of Sinope. Diarbeker on the Tigris, in lat. 37° 54' N., long. 39° 53' 45" E., is one of the principal seats of Eastern commerce; caravans set out regularly from it for Aleppo, Smyrna, and Constantinople. But there is no doubt that Trebizond, Sinope, and the neighbouring ports on the SE. coast of the Black Sea, are the natural channels through which Armenia, Koordistan, and the north-western parts of Persia may best maintain an intercourse with Europe. And in the event of the commerce with the coun-

tries referred to becoming of any considerable importance, Sinope would be an advantageous entrepôt to which goods might be brought, and whence they might be conveyed in proper vessels, and at proper times, to the other ports.

In ancient times, Sinope was a city of great wealth, magnitude, and importance—*Ponticarum urbium clarissima*. At a very early period it was colonised by the Milesians. Having enjoyed a lengthened period of independence, it was taken by Pharnaces, grandfather of Mithridates. The latter made it the capital of his empire; and on his fall it came, with the contiguous territory, into the possession of the Romans. A colony was subsequently planted in it by Augustus, and it continued for a lengthened period to enjoy a good deal of consideration. It was surrendered, or rather sold, to the Turks in 1461, when it was much stronger and more populous than at present.

The famous philosopher, Diogenes the Cynic, was a native of Sinope, where he first saw the light anno 374 B. C.

SISTOW, or SISTOVA, a town of European Turkey, prov. Bulgaria, on the Danube, which is here more than ¼ m. broad, 36 m. WSW. Rustchuk. Pop. estimated at 20,000, including many Armenian and Greek merchants. It occupies a large extent of ground, surrounded by a palisade and a dry ditch. The town is beautifully situated. A range of well-wooded hills commences a league or two to the W., and extends a considerable way along the right bank of the Danube. The town, rising at the water's edge, winds its way up the undulations of the eminences. After ascending for a while, the houses are lost; then they appear higher up, and the whole is protected by a citadel, which crowns the summit. Sistow has some trade in leather and cotton. It was here, in 1791, that a treaty of peace was signed between Austria and Turkey, after the latter had lost Rimnik and Ismail to the Russians.

SITTINGBOURNE, a town and par. of England, co. Kent, lathe Scray, hund. Milton, on the railway from London to Canterbury, 15 m. W. by N. the latter. Area of par. 1,260 acres. Pop. 4,301 in 1861. It consists chiefly of one wide street, running along the high road, and has several good inns. The parish church, a spacious building, has been renewed since 1762, when it was destroyed by fire. The living, worth 212*l.* a year, is in the gift of the archbishop of Canterbury. In 1508, Queen Elizabeth incorporated Sittingbourne under a mayor and jurat, with the privilege of sending 2 mems. to the H. of C., and of holding a weekly market and fairs; but these privileges seem never to have been exercised, except as respects the fairs, which are held on Whit Monday, Tuesday, and Wednesday, and Oct. 10. The markets are held once a month.

SIVACHE, or PUTRID SEA, the *Palus Putris* of the ancients, a lagoon on the east side of the Crimea. On the N. it communicates with the sea of Azoff, by the narrow strait of Yenitchi, being everywhere else separated from it by a narrow, low, sandy tongue of land, stretching NNW. from Arabat in the Crimea to opposite Yenitchi, a length of nearly 70 m. The lagoon is shallow, and its W. side, forming the E. shore of the Crimea, is extremely irregular. When the wind blows from the E., the water of the sea of Azoff is forced through the strait of Yenitchi, and covers the whole surface of the lagoon; but at other times it exhibits a large extent of mud, the exhalations from which are, in summer, exceedingly unhealthy. The Salghir, the principal river of the Crimea, falls into this lagoon.

ster, in the most southerly portion of the co. Cork, on the Glen, which is navigable from Baltimore to within $\frac{1}{2}$ m. of the town, 40 m. SW. Cork. Pop. 3,694 in 1861. It is a brisk, thriving town, and has a considerable retail trade. It has a par. church, a R. Cath. chapel, a Methodist meeting-house, several schools, a dispensary, market-house, barrack, court-house, and bridewell. Petty sessions are held on Wednesdays, and it is a constabulary and coast-guard station. It has several large flour-mills and a brewery. The exports, which principally consist of corn, meal, flour, and provisions, are mostly shipped from Oldcourt, 2 m. lower down the river, where vessels of 200 tons load and unload. Markets on Wednesdays and Saturdays; fairs, May 14, July 10, Aug. 2, Oct. 12, and Dec. 11 and 23.

SKIPTON, a market town and par. of England, W. riding co. York, wapentake Staincliff and Ewcross, E. div., in the mountainous distr. of Craven, and on the Aire, 38 m. W. York. Area of par. 26,760 acres. Pop. 7,734 in 1861. The town, consisting principally of one spacious street, is built wholly of stone from the neighbouring hills. The parish church has some monuments of the Clifford family. The living, a vicarage in the gift of the dean and chapter of Christchurch, is worth 185*l.* a year. The Friends, Independents, and Wesleyans have meeting-houses; and there is a flourishing grammar school, founded in 1528, the pupils of which are eligible to the exhibitions of Lady E. Hastings at Queen's College, Oxford, and to two exhibitions in Christ College, Cambridge. The town has also another endowed, or Clerk's school, and a national school.

Near the church is Skipton Castle, the seat of the Earl of Thanet, supposed to have been originally built soon after the Conquest. Though not well placed for a fortress, it was of some consequence in that capacity during the wars of Charles I. It was dismantled in 1646, but is now a splendidly fitted up noble residence. Skipton is governed by a constable elected annually at the manorial court-leet, and the general quarter sessions for the W. riding are held in its town-hall. It has some paper and cotton mills, and a considerable trade in corn, sheep, and cattle, much facilitated by the Leeds and Liverpool Canal, which passes close by the town. Market day, Saturday. Fairs, March 25; Palm Sunday eve, Easter eve, and three Tuesdays next after Easter, for horses, cattle, and sheep; Whitsun eve, Aug. 5, Nov. 20 and 23, for horses, woollen, and linen cloths, mercery, and pedlery.

SKYE, one of the Hebrides, which see.

SLAVONIA, or SCLAVONIA (Hungar. *Tot-Ország*), a prov. of the Austrian empire, usually regarded as forming a part of Hungary, and chiefly included within its military frontier; between the Drave and Danube on the N. and E., and the Save on the S., dividing it from Servia, Bosnia, and Turkish Croatia, and having Austrian Croatia on the W. Area, 3,643 sq. m. Pop. 478,530 in 1857, principally Slavonians of the Greek church, but partly, also, German colonists, Gipsies, and Jews. A branch of the Carnic Alps, almost wholly of calcareous formation, runs E. and W. through Slavonia: but these mountains are of no great elevation, and a large part of the surface is flat. The plains are very fertile, though frequently unhealthy from the presence of extensive marshes along the large rivers. Wheat, rye, oats, barley, and most other grains are produced in abundance, besides flax, hemp, tobacco, and madder. A good deal of strong wine is made,

SLAVONIA

favourite liquor *slivovitz* is distilled. The hill ranges are covered with forests, consisting of excellent oak. The breeding of live stock, particularly of hogs, which feed at large in the forests, is extensively pursued. The silkworm succeeds, but is not much reared. The prov. is said to possess iron, salt, sulphur, and perhaps coal; but marble only is raised in any quantity. Manufactures, mostly domestic, excepting some of glass and earthenware, and potash. The trade partly consists in the exportation of the raw produce of the prov., and partly in the transit of products. The principal articles of export are cattle and hogs, which go to the most distant provs. of the Austrian empire; hides, skins, rye, wheat, honey and wax, galls, and timber. Slavonia is divided into three counties, and four military districts: chief towns, Esseck, the cap., Peterwardein, and Posega.

Slavonia and the Banat comprise the most important portion of Hungarian military frontier, the system of defence organised in which deserves some notice. 'The object,' says a well-informed writer, 'has been to maintain, at the least possible cost, along the whole Turkish frontier of Hungary, a force which, in peace, might be employed for the purposes of quarantine and customs, and in war serve as a portion of the standing army. This has been effected so perfectly, that in peace nearly 40,000 men do duty along 800 m. of frontier; and they not only feed and clothe themselves, but pay heavy taxes in money besides, and perform, also, a considerable quantity of labour without pay. The land acquired by government along the whole of this district is held as fiefs on the tenure of military and civil service, from 36 to 50 acres constituting a fief. Each of these is bound to furnish, and to maintain and clothe, according to its size, one or more men-at-arms. The fiefs are given to families composed of several members, of which the eldest is the *house-father*, and who, with the *house-mother*, has the direction of the farm, the care of the house, and the right to control the whole family. The fiefs cannot be sold: the land is cultivated for the common good of all the members of a family; and the profit, if any remain after the taxes and other expenses are defrayed, is divided among them. In most cases, many married couples, with their children, sometimes to the number of 50 individuals, live under the same roof, cultivate the same land, eat at the same table, and obey the same father. The border-family has to do civil service for the state, as in the repair of post-roads and bridges, draining of swamps, &c., one day per annum for every English acre, and eight days a year for the village. The borderer's chief tax, besides the furnishing the uniform (government supplying the arms), is the land-tax, amounting, for an entire fief, to from 15*s.* to 30*s.* a year. In time of peace, the man-at-arms repairs to his military station for seven days at a time, where the family provides him with food. Besides this, he has the duty of transporting letters, as well as the money and baggage of his regiment, and of performing exercise. For the ordinary service, the number of men on duty amounts to 4,180. In times of disturbance on the Turkish side, or when the plague is drawing near, it is increased to 6,800, and, in times of still greater danger, to 10,000. In time of war, the borderer must form a part of the regular army, and march out of the country if required. The regular disposable force amounts to 34,800 men, but if the reserve and the *landwehr* be called out, to 100,000. If driven to the last

200,000 men. By means of alarm-fires and bells, this immense force may be summoned together through the whole extent of the frontier in the space of four hours. The borderers are divided into seven regiments. Every regiment receives its orders ultimately from the council of war at Vienna. The Hungarian diet has no control over the levy and supply of these troops; and the schools, the language of the service, and many of the laws in the military border, are exclusively German.

SLEAFORD (NEW), a market town and par. of England, co. Lincoln, wapent. Flaxwell in Kesteven, on the Sleas, 16 m. SSE. Lincoln. Area of par. 3,160 acres. Pop. 3,467 in 1861. The town consists principally of three streets, and has a prosperous appearance. The church, founded in 1271, is interesting for its architecture. The tower, at the W. end, is much the oldest part, and is early English, but surmounted by a spire, 144 ft. in height, of a later date. The aisles and transept are in the decorated, and the chancel and other parts in the perpendicular style. The whole of the details of this church, in all its styles, are very good. In the chancel are several monuments to the Carr family, one of whom founded and endowed a free school in the town, and an hospital for 12 poor men. The school was closed from 1816 to 1835, during which period the school house was rebuilt; in the latter year it was re-opened, when it had an income of 189*l.* a year. There are several other charities, particularly Alvey's school for 40 children, which has received many endowments since that of its founder. Formerly the bishop of Lincoln had a palace at New Sleaford, but it no longer exists. A new Gothic sessions house has lately been built, in which petty sessions are held; and various other improvements have been effected in the town. The living, a vicarage worth 170*l.* a year, is in the gift of the prebendary of Lincoln cathedral. Market days, Mondays: fairs, Plow, Easter, and Whit Monday, for horses, cattle, and sheep; Aug. 18, for provisions; and Oct. 20, for cattle and sheep.

SLESWICK, or SCHLESWIG, a duchy belonging to Prussia, comprising the S. part of the peninsula of Jutland, between lat. 54° 15' and 55° 30' N., and long. 8° 40' and 10° 10' E., having Jutland Proper to the N., S. Holstein, from which it is separated by the Eyder; E. the Baltic, and W. the North Sea. Area, including the adjacent islands, 3,450 sq. m. Pop. 409,907 in 1860. Surface low and generally flat, being in parts varied only by a few undulating hills. Almost the whole of its western coast is either below or elevated very little above the sea, being defended from its irruptions (from which, however, it has frequently suffered much) by immense dykes and sluices. The country so protected consists principally of very rich marsh land, affording pasturage for large herds of very superior cattle, as well as great numbers of fine horses. In the interior the soil is sandy, interspersed with heaths, and not very productive, but on the eastern side it is fertile. There are no minerals of importance. The produce of corn, consisting principally of rye and barley, is sufficient for home consumption; and flax, hemp, and potatoes are also grown. But the raising of cattle and horses forms the staple employment; and these, with butter and cheese, form the principal articles of export. The fishery is carried on to some extent. The deficiency of timber for fuel is compensated by the abundance of turf. The country is mostly open; but it is in parts inclosed with quickset hedges, and the farmhouses are neat, and have a comfortable appearance. The principal manufactures are of

portant, consist mostly of linen, hempen, and woollen fabrics, made in the peasants' cottages. Lace is produced at Tondern, and there are a few paper, tile, and other factories. Flensburg is the principal place of trade: Schleswig, Flensburg, and Tonnungen are the other chief towns. The duchy belonged to Denmark till 1864, when it was taken possession of by the Austro-Prussian army, and finally made over to Prussia by the treaty of Prague, of Aug. 23, 1866.

SLESWICK, or SCHLESWIG, a sea-port town of Prussia, cap. of the above duchy, at the bottom of the long, narrow gulf, or arm of the sea, called the Sley, 21 m. from its mouth, and 70 m. NNW. Hamburg, on the railway from Hamburg to Flensburg. Pop. 12,203 in 1860. Though irregularly built, its brick houses, neatness, and manner of building make it look like a Dutch town. It has 3 churches, including the cathedral, with several monuments, and a remarkable altar-screen; several hospitals, a deaf and dumb asylum, schools for the poor, a patriotic union, and other societies, a nunnery, a savings' bank, with manufactures of lace, woollen stuffs, and earthenware. Its commerce has been a good deal increased since the improvements in the navigation of the Sley; still, however, it is accessible only by the smaller class of vessels. It was formerly a member of the Hanseatic league, and a town of some note as early as the 9th century. In its immediate vicinity is the castle of Gottorp, formerly the residence of the dukes of Holstein-Gottorp.

SLIGO, a marit. co. of Ireland, prov. Connaught, having N. the Atlantic Ocean, E. the co. Leitrim, SE. Roscommon, and SW. and W. Mayo. Area, 434,887 acres, of which 168,711 are mountain and bog, and 8,260 water. Surface much diversified; but though it has a considerable extent of level rich land, it is, speaking generally, mountainous, rough, and boggy. There are a few large estates; but a considerable portion of the co. is divided among small proprietors. The statements as to the mode of occupying land, its management, and the condition of the inhabs., given under the notice of the co. LERRIM, may be applied with little or no modification to this co. The great increase within the last few years in the amount of the exports from the town of Sligo, show that there must have been a corresponding extension of cultivation in this co. and the contiguous portions of Leitrim. But unhappily the extension, and even improvement, of tillage in Ireland is not always accompanied by any corresponding improvement in the condition of the occupiers, which is here extremely bad. The *con-acre* system has made much progress in this co.; the competition for land is extreme; and the occupier of any over-rented patch that may choose to part with it, never fails to get a considerable sum as 'tenants' right.' It has neither minerals nor manufactures of any importance. Principal rivers, Gavoge, Arrow, and Awinmore. It is divided into 6 baronies and 39 parishes, and returns 3 mems. to the H. of C., two being for the co. and 1 for the bor. of Sligo, the only town of any importance in the co. Registered electors for the co. 3,181 in 1865. At the census of 1861, the co. had a pop. of 125,079; while, in 1851, the pop. amounted to 128,515, and in 1841 to 180,886.

SLIGO, a parl. bor. and sea-port town, on the W. coast of Ireland, prov. Connaught, cap. of the above co., at the bottom of Sligo Bay, and at the mouth of the river Gavoge, 107 m. NW. Dublin, on the Midland Great Western railway. Pop. 10,420 in 1861. Sligo is intersected by the Gavoge, which has its source in Lough Gill, distant

S. side of the river, is connected with that on the N. by 2 bridges. The streets are irregularly laid out, and those in the older parts of the town are narrow, dirty, badly paved, and badly lighted. Of late years, however, several new markets, warehouses, and lines of streets have been erected; and it has a good deal of the bustle and appearance of a place of trade. The town has a library, 2 news-rooms, a small theatre, and a cavalry barrack. The ecclesiastical buildings comprise the par. churches of St. John and Calry; a large Rom. Cath. chapel, a Dominican convent, and places of worship for Presbyterians, Independents, and Wesleyan Methodists. The ruins of Sligo monastery deserve notice for their architecture and for a monument of O'Connor Sligo, who died in 1623. There are 2 par. schools, a school in connection with the Board of National Education, one on the foundation of Erasmus Smith, and one under the Incorporated Society. The county infirmary, fever hospital, and dispensary, and a mendicity association, are within the town. A lunatic asylum was erected in 1850.

The bor., which was chartered by James I. in 1614, is divided, under the Irish Municipal Reform Act, 3 & 4 Victoria, cap. 108, into 3 wards, and is governed by a mayor, 5 aldermen, and 18 councillors. Sligo returned 2 mems. to the Irish H. of C., and since the Union it has sent 1 mem. to the Imperial H. of C. Area of parl. bor. 3,001 acres; of municipal do. 417 acres. Registered electors, 836 in 1865.

A board of commissioners, appointed under local acts, superintends the police of the town, and the improvement and regulation of the quays and harbour, with power to impose rates for those purposes. Under their management the port has been a good deal improved. An extensive new quay and warehouses have been erected outside the bar; and though rather difficult of access, the port is now tolerable. There are about 12 ft. water close to the quay, so that vessels of 250 and 800 tons come up to the town. The assizes and general sessions of the peace for the co. are held here; the latter four times in the year, and petty sessions every Thursday. The linen trade, which was formerly carried on with some spirit, is now nearly extinct. The town has several flour mills, a distillery, and four breweries. The markets for corn and butter, on Tuesday and Saturday, are held in buildings erected for the purpose. There is a valuable salmon fishery close to the town. On the 1st of January, 1864, there belonged to the port 10 sailing vessels under 50, and 19 above 50 tons, besides 3 steamers, of an aggregate burthen of 269 tons. The customs revenue, for 1863, amounted to 28,463*l*.

SMOLENSKO, a government of European Russia, between the 53rd and 57th degs. of N. lat. and the 30th and 26th E. long., having N. the governments Pskof and Tver, E. Moscow and Kaluga, W. Witepsk and Moghilef, and S. Orlof and Tchernigof. Area estimated at 20,220 sq. m.; pop. 1,102,076 in 1858. Surface mostly an undulating plain, in some parts marshy; in the N. is a more elevated plateau in which the Dniepr and several other rivers have their source. The soil is generally fertile, and more corn, principally rye, is grown than is required for home consumption. Hemp, flax, tobacco, and hops are cultivated. Cattle breeding is less attended to, but a good many hogs are reared. The forests are very extensive, and the chief sources of wealth. Game is plentiful, and bees are reared almost everywhere.

carpet factories in the cap. The raw produce of the government is exported to Riga, Wilna, and Moscow. It is divided into 12 circles.

SMOLENSKO, a town of European Russia, cap. of the above gov., on the Dniepr, 230 m. W. by S. Moscow. Pop. 17,066 in 1858. The town is situated on both sides the river, and is surrounded by a massive wall flanked with towers. It appears to advantage at a distance, but is in reality a poor town, the houses being mostly of only one story, and built of wood; but since it was burned by the Russians, previously to their evacuating it on the advance of the French, in 1812, it has been partially rebuilt of stone and brick. Smolensko has 3 cathedrals, in one of which is a bell weighing 350 cwts, 16 Greek churches, 3 convents, a Lutheran and a Roman Catholic church, a seminary, gymnasium, a military school for nobles, several hospitals, and some carpet, hat, soap, and leather factories. In 1838, an iron pyramid was erected here to commemorate the resistance made by the town to the French in 1812.

Smolensko is of considerable antiquity. It has suffered numerous vicissitudes, but has always been a town of some consequence.

SMYRNA, an ancient and celebrated city and sea-port of Asia Minor, the greatest emporium of W. Asia, on the W. side of the Meles, at the bottom of the gulf of its own name (an. *Hermius Sinus*); lat. 38° 25' 36" N., long. 27° 6' 45" E. Its pop. may be estimated at from 120,000 to 150,000, more than half being Turks, and the rest Greeks, Jews, Armenians, and Franks. It is surrounded, at some distance, by an amphitheatre of lofty mountains, which leave it open only towards the sea; and immediately adjoining the city, on the W., is the ancient *Mons Pagus*, which commands a noble view. This eminence is now called the Castle Hill, from a citadel erected on its summit, in the 13th century, by the emperor John Comnenus. A triangular plain, spread at the foot of this hill, along the shore, and the slopes of the hill itself, compose the site of Smyrna. One side extends along the shore from W. to E. for about 2½ m. The Turks occupy the upper part of the city, their streets hanging down the slopes of the hill; the Armenians are in the centre; the Jews have two or three different places around both; and the Franks spread themselves in the flat ground and close to the shore. Extending SE. is a plain filled with gardens, and every part of the city is interspersed with shady trees. The view of Smyrna from the bay, rising amphitheatrewise from the water's edge, backed by the hill crowned with its old castle, is grand and impressive. Unfortunately, however, its interior has all the features common to Turkish towns. 'If a first view,' says Mr. Elliott (*Travels*, ii. 34), 'be calculated to make a favourable impression, this is not confirmed by an inspection of the interior of the city. The Frank quarter is dirty, ill-paved, and narrow; in addition to which it is rendered almost impassable by long strings of camels and porters carrying huge bales of cotton. The houses (excepting those of the consuls and principal merchants, which are large and commodious) are miserably built; the sides consist often of planks; and when of bricks, the walls are too thin to keep out cold and damp. Neither windows nor doors are made to shut close; and if locks appear on the latter, it is too much to expect that they should be serviceable. There is a great lack of accommodation for travellers. The only inn in the town contains but a single decent room, and the noise of revelry is incessant. Besides this, there are three boarding-

or months. The apparatus commonly used for supplying warmth to the body in cold weather is a brazier placed under the table, which is covered by a large cloth held by each member of the family circle up to the chin, to prevent the heat from escaping. Grates and stoves have of late years been introduced, but they are still rare, and to be seen only in Frank dwellings. The shops are little dark rooms, but tolerably supplied with European articles. The bazaars, with their long covered rows of stalls, built with sundry precautions against fire, whose ravages are awfully common, are secured by iron gates closed at night. As to the rest, Turkish towns in general offer little variety, and the description already given of Constantinople applies to Smyrna, except as regards the finer buildings, greater extent, and gaudy exterior of the capital. Smyrna suffered severely from a fire in 1845.

The principal buildings of Smyrna are the bazaar and *bezestein*, or market-place; the vizier-khan, constructed of the marble ruins of the ancient theatre; the palace of the *mutsellim*, or governor, and the various mosques, churches, and hospitals. There is a large public hospital in the NE. part of the Frank quarter, supported by the Greeks, Franks, and other Christians, which ranks high in Turkey for its school of medicine. Its buildings comprise a laboratory, and three sets of wards around a courtyard shaded by rows of trees. The castle on Mount Pagus is very extensive, and occupies the site of the ancient acropolis. This fortress has been frequently repaired by the Turks, and accordingly presents an incongruous intermixture of architecture; but it is now mostly deserted and in ruins, though a few old cannons are still mounted on its walls. Within are some vaults and cisterns, supposed to be coeval with its foundation; and a large but abandoned mosque, formerly a church dedicated to Saint Polycarp, bishop of Smyrna, who is supposed, though on no very good authority, to have suffered martyrdom near the same spot.

Smyrna was the seat of one of the seven Apocalyptic churches (Rev. ii. 9); and, according to Mr. Elliott (Travels, ii. 45), 'there is not one of these churches within whose precincts the trumpet of the gospel now gives so distinct and certain a sound. While Mohammed is acknowledged in 20 mosques, and Jews assemble in several synagogues, the faith of the Messiah is taught in an Armenian, 5 Greek, and 2 Rom. Catholic churches, and in 2 Protestant chapels, one connected with the English, the other with the Dutch consulate.' The Armenians have a large academy at Smyrna.

Being surrounded by an amphitheatre of mountains, which concentrate the rays of the sun and interrupt the breeze, the heats at Smyrna, from June to the middle of Sept., are usually intense; and if the *inbat*, or sea-breeze, fail, the inhab. are almost suffocated. This great heat and want of ventilation, joined to the filthy and crowded state of the streets and houses, and the want of any efficient precautions on the part of the authorities, seldom fail to generate the most destructive diseases, among which the plague not unfrequently makes its appearance, and commits dreadful ravages. At such periods all commercial and social intercourse immediately cease; and the French inhab. retire to and shut themselves up in their country houses in the surrounding villages. The Turks, who are firm predestinarians, have hitherto taken few or no precautions to counteract the progress of the infection, or to guard against it; but it is stated by late travellers that some change is now beginning to take place in this

slowly adopting some of the devices by which Europeans attempt to ward off the malady.

Port and Commerce.—Though frequently overthrown by earthquakes, and laid waste by hostile incursions, the excellence of her port, and her advantageous situation for commerce, has always kept Smyrna flourishing; and she still continues to be a great city, while Ephesus, Miletus, and other celebrated emporiums on the same coast, have, from the filling up of their harbours, been long since reduced to total ruin. The Gulf of Smyrna, the entrance to which is between the island of Mytilene on the N. and Cape Carabourun on the S., is deep and angular, the distance, following a ship's course from the entrance to the city, being about 11 nautical leagues. There is excellent anchorage in most parts of the gulf, merely avoiding the shoals on its N. side. Ships of large burden usually anchor abreast of the city in from five to seven fathoms; but the water is so deep that they may lie close alongside the quays. The *inbat*, or sea-breeze, blows from morning till evening during the hot months, and is always waited for by ships going up to the city; and there being no obstructions in the way, the services of pilots are not required. In the night a land-breeze generally blows from the city out to sea.

The principal articles of import consist of grain, furs, iron, and butter, from Odessa and Taganrog; and of cotton stuffs and twist, silk and woollen goods, coffee, sugar, cochineal and dye woods, iron, tin, and tin plates, rum, brandy, paper, cheese, glass, and wine from Great Britain, France, Italy, and the U. States.

The exports consist principally of raw silk and cotton, the former produced about Brusa, and sent chiefly to England; fruits, particularly raisins and figs; opium, which goes chiefly to America and Holland; rhubarb, and a variety of drugs and gums; olive oil, madder roots, Turkey carpets, valonea, sponge, galls, wax, copper, hare-skins, goats' wool, and safflower.

The subjoined table gives the value of the principal and other articles imported at the port of Smyrna in the year 1863:—

| Imports | Value |
|---|-----------|
| | £ |
| Metals, Steel, Iron, &c. | 168,183 |
| Silk Manufactures, Bonnets, &c. | 749,314 |
| Butter and Cheese | 106,816 |
| Coffee, &c. | 149,048 |
| Cotton and Woollen Stuffs, &c. | 1,210,928 |
| Drugs and Medicines | 150,800 |
| Flour, Wheat, and Potatoes | 104,799 |
| Cured Hides | 129,328 |
| Paper and Cardboard | 143,513 |
| Rum, Brandy, Wine, and Liqueurs | 130,147 |
| Tobacco and Cigars | 158,132 |
| Other Articles | 469,565 |
| Total | 3,730,523 |

The subjoined table shows the value of the principal articles exported from Smyrna in 1863:

| Exports | Value |
|--|-----------|
| | £ |
| Valonea | 758,390 |
| Cotton | 1,674,536 |
| Leeches | 587,192 |
| Dried Fruits | 1,188,108 |
| Wool and Horsehair | 148,164 |
| Eggs | 103,200 |
| Soap, Salt, Cord, Tobacco, &c. | 123,140 |
| Other Articles | 250,249 |

The money, weights, and measures are mostly the same as at Constantinople. Accounts are kept in piastres of 40 paras. The value of the piastre fluctuates according to the exchange. The oke, which is the principal weight, = 12 lbs. 13½ oz. avoird.; the quintal = 127·48 lbs. avoird.

Smyrna is well supplied with provisions of all kinds. Fish, including red mullet and oysters, are very plentiful in the bay; and game of all kinds, mutton, and the flesh of wild boars, are good and abundant. Whey and clotted cream are used in great quantities. Sweet lemons, oranges, citrons, water-melons, figs, and grapes are grown in great perfection in the environs, particularly at Menomen, and the other villages on the opposite side of the gulf; whence boats, carrying fruits and other provisions, are continually passing to Smyrna. Most travellers speak of the agreeable society met with in Smyrna; and the Greeks have begun to adopt the manners and costumes of W. Europe.

Historical Notice.—The accounts of the foundation and early history of Smyrna are obscure and somewhat contradictory. The most probable seems to be, that it was founded by a colony from Ephesus. (Strabo, lib. xiv.) After undergoing various vicissitudes, it was destroyed by Alyattes, king of Lydia, the inhab. being dispersed among the surrounding villages. At the distance of about 400 years, a project for reconstructing the city would appear to have been entertained by Alexander the Great; but, if so, it was not carried into effect by that conqueror, but by Antigonus and Lysimachus. The city built by them was not, however, on the site of the old city, which stood on the flat shore on the other side of the Meles, about 2½ m. N.E. from the modern city. The admirable port and other advantages enjoyed by the newly built city rendered it, in a short time, one of the most populous, wealthy, and handsomest of the Asiatic cities. 'It is,' says Strabo, 'the finest city of Asia. Part of it is built on a hill; but the finest edifices are on the plain not far from the sea, over against the temple of Cybele. The streets are the most beautiful that can be, straight, wide, and paved with freestone. It has many stately buildings, magnificent porticoes, majestic temples (incl. an *Homerium*, or temple in honour of Homer), a public library, and a convenient harbour, which may be shut at pleasure.' (Lib. xiv. *sub init.*) Under the Romans, Smyrna enjoyed the greatest consideration, and M. Aurelius rebuilt the city, after it had been almost destroyed by an earthquake. It was much frequented by the Sophists; and, along with Ephesus, became renowned as a school of oratory and science.

In more modern times it has undergone innumerable calamities, from which, as already stated, nothing but its admirable situation for commerce could have enabled it to recover. It was taken and given up to military execution by the famous Tamerlane, or Timur Bee, in 1402; and finally came into the possession of the Turks, in 1424.

Smyrna is one of the numerous cities that contended for the honour of being the birthplace of Homer; and Chios, perhaps, excepted, she would seem to have the best claim to this proud distinction. '*Homerum Smyrnæi suum esse confirmant; itaque etiam delubrum ejus in oppido dedicaverunt.*' (Cicero pro Archia, cap. 8.) From being born on the banks of the Meles, which washed the walls of the ancient as well as of the modern city, Homer is sometimes called *Melesigenes*.

'Blind Melesigenes thence Homer call'd,
Whose poem Phœbus challeng'd for his own.'

Thence also Tibullus (lib. iii. eleg. i. v. 210) calls

says (Archaic. cap. 5), that a cave was pointed out at the source of the Meles, where they were said to have been composed.

Owing to the influence of earthquakes, and the still more destructive attacks of barbarians, Smyrna has but few considerable remains of antiquity. They consist principally of portions of the old walls, especially along the castle-hill, with some vestiges of the theatre and stadium. Many pedestals, statues, inscriptions, and medals have been and are still discovered in digging; and perhaps no place has contributed more than this to enrich the collections and cabinets of Europe.

It has been supposed that the mud and other detritus brought down by the Kodus (an. *Hermus*), which has its embouchure on the N. side of the gulf, will, in the end, fill up the channel; and, by depriving the city of its port, effectually consummate its ruin. But though this effect may ultimately be brought about, it is abundantly certain, comparing the banks at the river's mouth with the space that has to be filled up, that a lengthened series of ages must previously elapse.

SNOWDON, a mountain of N. Wales, in Caernarvonshire, being at once the highest in the range of which it forms a part, and in S. Britain. The mountain, which is about 10 SE. from Caernarvon, terminates in various peaks; the highest peak, the Wyddva (conspicuous), to which the name Snowdon is more particularly applicable, and which scarcely out-tops several of the surrounding summits, is 3,571 ft. above the level of the sea. The W. side of the mountain is very precipitous, and is composed partly of pentagonal basaltic columns. The view from the summit is very extensive. 'I saw from it,' says Pennant (Tour in Wales, ii. 387), 'the co. of Chester, the high hills of Yorkshire, part of the N. of England, Scotland, and Ireland; a plain view of the Isle of Man; and that of Anglesey lay extended like a map before me, with every rill visible.'

SOCIETY ISLANDS. See POLYNESIA.

SOCOTRA (an. *Dioscoridis Insula*), an island in the Indian Ocean, about 230 m. from the S. coast of Arabia, and 120 m. E. Cape Gardafui, in Africa, its chief town being in lat. 12° 39' 2" N., long. 54° 6' 29" E. It is of an elongated shape. Area estimated at 1,000 sq. m. Pop. probably 4,000 or 5,000, principally Bedouins, with some settled Arabs, African slaves, and descendants of Portuguese. The S. coast of Socotra preserves a convex and nearly unbroken line, but on the N. it is indented with many bays and harbours. The interior may be described as consisting of mountains, nearly surrounded by a low plain of from 2 to 4 m. in width, extending from their base to the sea. The mountains are highest towards the NE. part of the island, where their granite peaks rise to about 5,000 ft.; elsewhere they average nearly 2,000 ft. in height, and consist mostly of compact cream-coloured primitive limestone. The island is not well-watered; but the E. is, in this respect, better than the W. portion. The climate does not appear to be particularly salubrious, though it is more temperate than in the adjacent continent. Among the few natural products, the most important is aloes (*Aloë spicata*, or *Socotrina*), for which the island has been famous from the earliest period. This plant is found growing spontaneously and in great abundance on the sides and summits of the limestone mountains, at an elevation of from 500 to 3,000 ft. above the level of the plains. Its leaves are plucked at any period, and after being placed in a skin, the juice is suffered to exude from them. In this state they are mostly shipped for Muscat. Formerly the parts of the

ferent individuals, the produce being taken at a low fixed price by the sultan. At present any one collects the aloe leaves who chooses to take the trouble, and nothing is levied on the sultan's account. Dragon's blood is the article next in importance; it is the produce of a leguminous tree, the *Pterocarpus draco*, which grows on the mountains. Tamarinda, tobacco, and dates (important as food) are also grown. Agriculture is in an exceedingly low state, a species of millet being the only grain cultivated, and it is little used unless a failure of milk and dates be experienced. The animals are camels, sheep, goats, oxen, asses, and civet cats. Sheep and goats are kept in large flocks in every part of the island: they are generally of inferior kinds, while the cattle, on the contrary, though small, are very superior, and appear to be of the European variety. The trade is principally with Muscat, whence dates and other provisions are chiefly imported. According to Arrian, the inhabs. of this island were, in antiquity, subject 'to the kings of the incense-country,' or Southern Arabia. At present Socotra belongs to the Sultan of Kisseen, but his supremacy is little more than nominal, the government being chiefly delegated to one of the principal inhabs., who again exercises little authority, except over the Bedouin, or native pop. The tribute to the sultan barely amounts to 200 dollars a year. The population is wholly Mohammedan. The women go unveiled, and are partly occupied in tending flocks, and partly in making glue, and carding, spinning, and weaving wool.

The only town of any consequence is Tamarida, on the NE. shore, in the centre of a bay which affords tolerable anchorage. Having been ruined by the Wahabees, in 1801, it consists of only about 150 straggling and dilapidated houses.

SOHAM, a market town and par. of England, co. Cambridge, hund. Staploe, near the borders of Suffolk, 6 m. SSE. Ely. Area of par. 18,420 acres. Pop. 4,278 in 1861. The town, which is irregularly built, covers a good deal of ground. The par. church is of various dates, one portion being late Norman. Soham has numerous charities, especially Bishop Laney's, for apprenticing children of the par., with an annual revenue of near 400*l.*, a large charity school, and several almshouses. The fen or mere, which once covered the adjacent country, has been drained and cultivated, and supplies most part of the dairy produce, for which Soham is celebrated. Market day, Saturday. Fair, May 7, for horses and cattle.

SOISSONS (an. *Noviodunum*, post. *Augusta Suessionum*), a fortified town of France, dép. Aisne, cap. arrond., on the Aisne, here crossed by a handsome stone bridge, 17 m. SW. Laon, on the railway from Paris to Rheims. Pop. 10,208 in 1861. The town is well built and clean, the houses being mostly of stone, roofed with slate. There are many curious and venerable public buildings, inc. the cathedral, founded in the 12th cent., with an altar-piece by Rubens, representing the 'Adoration of the Shepherds'; the remains of an abbey founded in the 11th century; and the castle, on the site of that which was the residence of various Merovingian kings. The college, hospital, house of correction, public library with 18,000 vols., and theatre, deserve notice; and in the vicinity are the ruins of St. Medard's Abbey, founded in 557, in which Pepin, Carloman, &c., were crowned, and Louis-le-Debonnaire was confined by his sons. Soissons is a bishop's see, and has a court of primary jurisdiction, a communal college, two seminaries, a society of arts and sciences, manufactures of coarse woollens, hosiery, and earthenware, and a con-

Soissons has been the theatre of various historical events. It was here, in 486, that Clovis finally extinguished the last remains of the Western Empire, by his victory over the Roman general Syagrius. The town then became the cap. of the Franks, and afterwards of a kingdom of its own name in the 6th and 7th centuries. It was frequently besieged and taken in the middle ages, and was the scene of some severe fighting between the French and the allies in 1814.

SOLOTHURN (French, *Soleure*), a canton of Switzerland, in the NW. part of the Confederation, between lat. 47° and 47° 30' N., and the 7th and 8th degs. of E. long., having N. Basle, E. and SE. Aargau and Lucerne, and on its other sides the canton of Berne. Area, 255 sq. m. Pop. 69,263 in 1860. Though of a very irregular shape, it may be divided into two nearly equal portions; the NW. covered with ranges of the Jura Mountains, and the SE. comprised in the valleys of the Aar and Emmen. Some of the summits in the former rise to about 4,000 ft. above the level of the sea; but though rugged, this part of the canton has a large extent of fine upland pastures. In the other, or lower portion of the canton, the ground is fertile and well-cultivated; so that, on the whole, Solothurn is regarded as one of the most productive portions of Switzerland. More corn is grown than is required for the consumption of the inhabs.; the vine does not succeed, but a good deal of fruit is notwithstanding grown for exportation. The rearing of live stock is here, however, as in most other Swiss cantons, the chief branch of rural industry. In 1838, it was estimated to have about 28,000 horned cattle, 14,000 sheep, and 16,400 hogs: the latter are fed in the woods, which are tolerably extensive. The cattle are esteemed among the best in Switzerland; they are of a peculiarly large-tailed breed, and with horses, cheese, cherry brandy, fire-wood, and marble, constitute the principal articles of export. Only a few hands are employed in mining, and the manufacturing establishments are mostly confined to a few iron works, stocking and cotton looms, paper mills, tanneries, and printing houses. The currency, weights, and many usages of this canton are similar to those of Berne.

Under the constitution, as modified in 1831, the greater council consists of 109 mems., 96 of whom are chosen by the towns and the 10 rural districts into which Solothurn is divided, and the remaining 13 by the mems. already elected. The lesser or executive council, composed of 17 mems., is chosen with its president, or *avoyer*, from among the greater council. The assembly meets twice a year for 15 days, during which period each mem. receives 3 fr. a day. The town of Solothurn and each of the districts has a court of primary jurisdiction for civil causes; but all criminal cases, as well as the final jurisdiction in civil suits, belong to a central tribunal of 14 mems., presided over by the *avoyer* of the state assembly. Every male inhab. above the age of 16 is liable to military service: the contingent to the army of the confederacy is 600 men. There is no town worthy of notice, except the cap., Olten and Dornek being mere villages.

SOLOTHURN, or SOLKURE (an. *Solodurum*), a town of Switzerland, and the cap. of the above canton, on the Aar, near the foot of the Jura Mountains, and 18 m. N. by E. Berne, on the railway from Aarau to Lausanne. Pop. 5,916 in 1860. The river divides the town into two unequal parts, which communicate by two wooden bridges. It was surrounded, in the 17th century, by cumbrous fortifications, the removal of a part of which was

tolerably well built, and has several conspicuous public edifices, including, among others, the cathedral of St. Urse, one of the best churches in Switzerland, with several other churches and convents, a town hall, a square clock-tower in the market-place, the arsenal, with an extensive and curious collection of armour, a museum, government house, with some good sculptures, hospital, house of correction, barracks, and theatre. It has also a gymnasium, a botanic garden, and a public library, said by Ebel to comprise 10,000 vols. On the whole, however, the town is dull, having few manufactures, and but little trade.

The Polish patriot and general, Kosciusko, resided here during the last two years of his life, which terminated on the 16th of Oct., 1817. His remains were carried to the cathedral of Cracow, where they repose beside those of the famous John Sobieski.

SOMERSET, a maritime co. of England; having N. and NW. the Bristol Channel, the Severn, and Gloucestershire, E. Wiltshire, S. Dorset and Devon, and W. the latter. Area, 1,052,800 acres, of which about 900,000 are supposed to be arable, meadow, and pasture. With, perhaps, the single exception of Yorkshire, there is no county in England that has a greater variety of surface and soil than Somerset. In some places, particularly in its W. and NE. divisions, it is hilly, and even mountainous; in its middle part, between the rivers Ax and Parry, there are very extensive tracts of marsh land, which, in some places, are of extraordinary fertility: in other places, again, there are extensive moors, of which Exmoor, at the W. extremity of the co., is the principal. But, exclusive of these, the co. contains a large extent of land equally adapted for tillage and pasturage. The Vale of Taunton is one of the richest and most beautiful tracts in the kingdom. Tillage husbandry is neither extensively carried on, nor in the most approved manner. The land is not injured by overcropping, but it is not properly wrought, and is frequently foul and out of order. Principal crops, wheat, oats, barley, and beans. In the southern and interior parts the rotation is, 1. fallow, 2. wheat, 3. beans or seeds, 4. oats; in the E. part of the co. it is generally, 1. fallow, 2. wheat, 3. oats or barley, 4. seeds. Potatoes are pretty extensively grown; but turnips are not cultivated to any extent in any part of the co. Lime is frequently used on the arable land; and, with the exception of dung, is the only manure that is employed. Drilling but little practised; beans mostly planted by the dibble. A large proportion of the co. is in grass, the dairy and fattening systems being both extensively carried on. Cattle, principally of the Devonshire breed, but a great variety of other breeds are met with. The celebrated Cheddar cheese is so called from a village of that name on the W. side of the Mendip Hills; but it is now principally made in the marshes round Glastonbury. Bridgewater cheese is made from the marshes between that town and Cross. The stock of sheep in the co. is supposed to amount to about 500,000 head, partly long and partly short-woolled; producing, in all, about 10,500 packs a year. Large quantities of excellent cider are made in various parts, but particularly in the Vale of Taunton. The woods and woodlands are supposed in all to cover from 20,000 to 25,000 acres, and it is distinguished by the stately growth of its hedgerow timber. Property variously divided; some large estates, but a good deal of land occupied by yeomen who farm their own estates. Farms of various sizes, but the majority

hold at will. Mineral products, numerous and valuable, consisting principally of coal, lead, calamine, fuller's earth, limestone, and freestone. Owing, however, to the lead mines having been nearly exhausted, or becoming more difficult to work, the produce of lead is now quite inconsiderable. The woollen manufacture used to be extensively carried on at Taunton, but it has given place to the silk trade, introduced in 1778, and at present prosecuted on a pretty large scale. The woollen manufacture is still, however, carried on at Frome, Shepton Mallet, Wellington, and some other places in the co.; but it has long been in a declining state. Gloves largely manufactured at Yeovil. Principal rivers, Lower Avon, Ax, Brue, Parret, and Exe. The Parret is navigable from Longport to its mouth. Taunton and Bridgewater are united by a canal; and there are canals in other parts of the co. Somersetshire is divided into 40 hundreds and 7 liberties, and contains 475 parishes. It returns 13 mems. to the H. of C., viz. 4 for the co., 2 each for the cities of Bath and Wells, 2 each for the bor. of Bridgewater and Taunton, and 1 for Frome. Reg. electors for the co. 20,499 in 1865, being 11,867 for the eastern, and 8,632 for the western division. At the census of 1861, the pop. numbered 468,261, while in 1841 there were 435,982 inhabitants.

SOMERTON, a market town and par. of England, co. Somerset, on rising ground beside the Carey, 11 m. SSW. Wells. Area of par. 6,080 acres. Pop. 2,266 in 1861. The town consists of some small streets, with houses mostly of blue lias stone; and has a town-hall in which petty sessions are held, and one of the co. gaols. The church, an ancient structure, has an eight-sided embattled tower, 68 ft. in height. The living, a vicarage, worth 259*l.* a year, is in the gift of the earl of Ilchester. Somerton has a good free-school, and an almshouse for 8 poor women.

Though supposed to have been a Roman station, there is no information respecting it till the Hephtharchy, when it was a considerable fortified town, and the residence of Ina and other kings of Wessex. Hence it abounds in Saxon antiquities including parts of the ancient walls, a round tower, and the castle, in which John, king of France, was imprisoned subsequently to his capture at the battle of Poitiers.

SOMME, a *dép.* of France, reg. N., comprised mostly in the old prov. of Picardy, between lat. 49° 37' and 50° 20' N., and long. 1° 25' and 3° 10' E.; having N. Pas-de-Calais, E. Aisne, S. Oise, and W. Seine-Inférieure and the English Channel, Area 616,120 hectares. Pop. 572,646, in 1861. Its general slope is towards the NW., which direction is taken by its principal rivers, consisting of the Somme, which divides it into two nearly equal parts, the Authic, forming a part of the N. boundary, and the Bresle, bounding it on the SW. The Somme rises at Fonsomme in Aisne, and runs generally NW. to the English Channel, which it enters a little below St. Valery, nearly opposite Hastings, by an estuary from 3 to 4 m. wide, after a course of about 120 m. Its principal affluents are the Avre and Celle; St. Quentin, Ham, Peronne, Amiens, and Abbeville are on its banks. The Somme is navigable for about half its course, but its navigation is interrupted by shoals. The lateral canal of the Somme (*Canal de Picardie*), 96 m. in length, commences at Abbeville, and connects this river with the Oise. This *dép.* has generally a naked aspect, but agriculture is more advanced than in most French *déps.* More corn is grown than is required for home consumption.

numerous, and the produce in wool is stated to be about 780,000 kilog. a year. Mineral products are of little importance; but the dép. is distinguished for its manufactures. Woollen, cotton, and silken goods of various kinds are made at Amiens and Abbeville; cotton and linen thread, oil, and leather at Peronne, Ham, and Doullens. Escarbotin is the seat of some of the largest hardware factories in the kingdom; and machinery, paper, and beet-root sugar are produced in considerable quantities. Somme is divided into five arronds: chief towns, Amiens the cap., Abbeville, Doullens, Montdidier and Peronne.

SOOLOO ISLANDS, a group of the E. Archipelago, 4th division (Crawford), extending from the NE. part of Borneo to Mindanao, the most S. of the Philippine Islands, between the 4th and 7th degs. of N. lat., and the 120th and 123rd of E. long.; having S. the Sea of Celebes, and N. the Sooloo Sea. They consist of about 60 islands, taking their name from Sooloo, one of the largest, about the middle of the group. They produce rice, sweet potatoes, yams, and many of the finest fruits of the East; but sago is the principal food of the inhabs. Pearls, mother-of-pearl, and cowries are among their most valuable products. Formerly the inhabs. carried on a large trade with Japan; at present their commerce is chiefly with the adjacent islands of Celebes, Mindanao, and Borneo, and a few junks that come yearly from China. The Sooloos are mostly Mohammedans, and live under a sultan, whose power is, however, much limited by a kind of feudal aristocracy. They are distinguished for their piracies, and their continual hostility to the Spaniards of the Philippines; in 1775 they destroyed an establishment formed by the E. I. Comp. on the neighbouring island of Balambagan.

SOPHIA, or **TRIADITZA**, a city of European Turkey, prov. Bulgaria, near its W. extremity, in a fine plain on the Bogana, a tributary of the Isker, 98 m. SSE. Widin, and 155 m. SW. Rustchuk. Pop. estim. at 43,000 in 1862. Sophia is generally considered as the cap. of Bulgaria, and as holding a high rank among the cities of European Turkey. The situation, however, is the most unfavourable that could have been chosen for a city: sunk in a hollow, it is constantly liable to be inundated; and without canals to carry off the superabundant waters of the Isker, the plain is almost lost to the labour of the agriculturist. The city is the residence of the begler-beg of Roumelia, and of Greek and Rom. Cath. archbishops. It has manufactures of woollen and silk stuffs, leather and tobacco, and an extensive general trade. There are some warm baths.

This city, founded by Justinian, was built, it is said, on the ruins of the anc. Sardica.

SORA, a city of Southern Italy, prov. Caserta, cap. distr., on the Liris, 50 m. NNW. Capua. Pop. 12,313 in 1862. Sora is about 3 m. distant from Isola, along an excellent road, which terminates with the valley itself at its gates. Here the Liris, flowing from a glen of narrower dimensions, but considerable length, forms a bend round the city, and is crossed by two bridges. The place is consequently in a flat but not unpleasant position, one whole flank being watered by the river, and the hinder extremity resting against an insulated rocky hill, on which are seen the ruins of its Gothic castle, and those of its still more ancient walls. The dwellings are large, the streets wide and well paved, and the pop. apparently easy and industrious. After its cathedral, in the front of which are a number of inscriptions and fragments

seminaries, and a showy modern gateway. The adjacent country is both fertile and well cultivated.

Sora was of Volscian origin, but became, at an early period, attached to the party of the Samnites: though subdued and colonised by the Romans, it repeatedly threw off their yoke, and vindicated its ancient freedom. Juvenal enumerates Sora among the country towns in which an individual, tired of the bustle and dissipation of Rome, might find a comfortable residence:—

‘Si potes avelli Circensibus, optima Soræ,
Aut Fabratoriz domus, aut Frusinone paratur.’
Sat. iii. 223.

Sora was the birthplace of the well known Cardinal Baronius.

SOKIA (an. *Numantia*), a city of Spain, in Old Castile, cap. prov. of its own name, on, and at no great distance from, the source of the Douro, here crossed by a fine stone bridge, 113 m. NE. Madrid. Pop. 5,004 in 1857. The city is enclosed by old walls, and has numerous churches and convents, a hospital, and Jesuits' college. On the E. it is commanded by an old fortress, now partly in ruins; and on the S. is a considerable suburb. It is ill-built, with a few silk fabrics, and some trade in wool.

Adjacent to the town, on the N., are the ruins of the famous city of **NUMANTIA**, destroyed by the Romans, anno 132 B.C. No people ever discovered greater bravery, or made a more gallant stand in defence of their liberties, than the inhabs. of this small state. ‘*Numantia, quantum Carthaginiæ, Capuæ, Corinthi, opibus inferior, tantum virtutis nomine et honore par omnibus, summumque, si viros æstimes, Hispaniæ decus.*’ (Florus, lib. ii. cap. 18.) The conduct of the Romans in this contest was distinguished alike by perfidy and vindictive malignity. The Numantines having defeated Pompey, grandfather of Pompey the Great, who had besieged their city, he concluded a treaty with them. But the Romans having, on various pretexts, broken this treaty, sent a powerful army against the Numantines under the consul Mancinus. The latter, however, being even more unsuccessful than Pompey, was obliged, to save himself and his army from total destruction, to conclude a new treaty with his successful adversaries, who stipulated for nothing but that they should retain their independence, and be reckoned among the friends and allies of Rome.

Tiberius Gracchus, then quæstor in the consular army, was a principal party to this treaty, the observance of which was sworn to by all the chief officers of the Roman army. But though the Numantines spared by this treaty the lives of 10,000 Roman soldiers that were in their power, and stipulated for nothing that a generous or high-minded people could, under any circumstances, have refused to concede, the senate and people of Rome were base enough to annul the treaty, and sent Scipio Africanus, who had destroyed Carthage, to wage a war of extermination against the Numantines. Scipio, who knew the bravery of those he had to contend with, did not attempt to carry the city by storm, but having surrounded it by strong lines of circumvallation, left famine to effect its reduction. Notwithstanding their inferior numbers, the Numantines made the most astonishing efforts to break through and destroy the works of the Romans; but having been repulsed, they were reduced to the most dreadful extremities. It is uncertain how the final catastrophe of this noble city was consummated; whether, as Florus affirms (lib. ii. cap. 18), the Numantines set it on fire and perished in the

p. 311), having surrendered, the small remnant of its inhabs. that were found alive were sold as slaves. One thing only is certain, that the struggle reflects the highest credit upon the Numantines, and the most indelible disgrace on the Romans. It is due to the character of Tiberius Gracchus to state, that he reprobated, in the strongest manner, the perfidy and bad faith of his countrymen in refusing to ratify the treaty with the Numantines.

SORRENTO (an. *Surrentum*), a city and seaport of South Italy, the Neapolitan dom., prov. Naples, on the S. side of the Bay of Naples, 18 m. SE. that capital. Pop. 7,180 in 1862. The city is well built and clean; and has been celebrated in antiquity, as well as in modern times, for the beauty of its situation, and the mildness of its climate, being hence called by Horace, *Surrentum amœnum*. (Epist. ii. 18, lin. 52.) It is the seat of an archbishopric; and, besides the cathedral, has several churches, numerous convents, a hospital, seminary, college, school of navigation, and some silk manufactures. It was supposed in antiquity to have been the seat of the Sirens. (Plin., lib. iv. cap. 5.) But it derives its principal illustration from its having been the birthplace of Torquato Tasso, the greatest of Italian poets, born here on the 11th of March, 1544. 'Among the many respectable houses termed palaces,' says an English traveller, 'which adorn Sorrento, that in which the author of the "Gerusalemme Liberata" was born, naturally excites the greatest interest; it is placed on the cliff rising immediately from the sea, and offers some pretensions to elegance of architecture, but probably retains in its outward form no remains of its ancient appearance. Sorrento is a place of high antiquity; and the various inscriptions, bas-reliefs, &c., found in it at different periods, are collected under an archway in the town, which thus forms a kind of open museum, accessible to every visitor. The ancient walls and towers can scarcely be referred to the Lombards, who erected this territory into a small indep. principality. Oil, milk, meat, and game are all excellent in their different kinds at Sorrento; while its veal is, by some, reputed the best in Europe. The capital is supplied from it with many of these articles, by boats plying at regular times of the day.' The beautiful bay of Sorrento, 3 m. wide, is surrounded by a semicircular range of wooded hills, between which and the sea is a rich plain, the *Piano di Sorrento*, in which are many villages and detached houses.

It was on the hills bounding the plain, *Colles Surrentini vitiferi*, that the famous wine was produced, which, in antiquity, vied with the Falernian and Cæcuban.

'Surrentina bibis? nec myrrhina picta, nec aurum
Sume: dabunt calices hæc tibi vina suos.'

Mart. Epig., lib. xiii. 110.

It was a powerful wine, and did not arrive at perfection till it had been kept above twenty years. Owing to the want of care, the wine now produced from Surrentine grapes is among the poorest in Italy. Near Sorrento are the remains of the villa of Pollius, described by Statius.

SOURABAYA, a considerable town of Java, being one of three principal sea-ports of that island, on the N. coast of which it is situated, about 160 m. E. Samarang. It stands about 1½ m. from the Strait of Madura, on both sides a river, said to be navigable by boats for 100 m. from the sea, and deep enough at its mouth to receive vessels of 250 tons. The town itself is of small extent, but it has several suburbs, and round it are a number of handsome villas; its vicinity,

though low, being less unhealthy than that of Batavia. Mr. Earl (Eastern Seas, p. 47) says that it is also much more gay and lively than the latter, and well supplied with provisions of all kinds. Sourabaya seems to have the only secure harbour on the N. coast of Java, and the only one in which the shipping is well defended by the batteries on shore. Its chief entrance is commanded by a strong fort on a low island about 9 m. from the town. Several English residents, agents to houses at Batavia, are settled here, though Europeans are upon the whole few. There are numerous Arabs and their descendants.

SOUTHAMPTON, a parl. and mun. bor., seaport, and market town of England, being a co. of itself in Hampshire, at the embouchure of the Itchen, in an inlet of the sea, called Southampton Water, 12 m. S. by E. Winchester, and 70 m. WSW. London, on the London and South Western railway. Pop. of bor. 46,960 in 1861. The approach to the town from the London road, through a fine avenue of trees and a well-built suburb, is exceedingly striking. The principal entrance is through Bargate, one of the ancient gates, which also divides the town into two parts, called respectively Above-bar and Below-bar. The High Street below bar, which is more than ½ m. in length, leads directly to the quay, for the improvement of which the water-gate was removed about forty years ago. The ancient part of the town was formerly enclosed with walls about 1½ m. in circ., of which there are considerable remains on the W. side of the town, and two old gates in addition to Bargate. Many smaller streets branch both E. and W. from the principal avenue, and buildings are rapidly increasing, the space occupied by streets and houses now exceeding 3½ m. in circuit. The old town occupies nearly the whole of the pars. of St. John, St. Lawrence, Holyrood, St. Michael, and All-Saints-intra. The pars. of St. Mary and All-Saints-extra are extensive, and were till of late years principally agricultural. The town, however, now extends into both of them; and in the latter the new buildings consist principally either of handsome town-houses or detached villa residences. The pars. of St. Lawrence and Holyrood, through which the High Street passes, contain the dwellings of the most respectable and opulent tradespeople; in the latter are the market place, audit house, custom house, several of the principal hotels, and the town quay; indeed, in a commercial point of view, these two pars. comprise the most important part of the town. The whole town is well paved, lighted with gas, and is exceedingly clean; the inhabs. are supplied with water from an Artesian well on Southampton Common, which furnishes 40,000 cubic feet per day. The old reservoirs on the common are supplied from this well in dry seasons. Besides the buildings devoted to commerce and other purposes, the town has a theatre and assembly-rooms. The military orphan asylum for girls, established by the late Duke of York, and occupying the disused barracks, has been removed, and the buildings are now appropriated to the establishment for the trigonometrical survey, removed thither from the Tower of London. The handsome suite of baths on the beach have been converted into a dock-house and offices for the Southampton Dock Company; but there are very convenient baths in other parts of the town. The old Saxon castle, repaired by Richard II., with the view of protecting the harbour, was pulled down a number of years ago, and a private chapel, in which the Church of England service is performed, built upon its site.

The town has five par. churches, three of which

are in the gift of the lord chancellor, one in that of the bishop of Winchester, and another in the patronage of Queen's College, Oxford. Holyrood church is an ancient edifice, with a tower and spire, the portico being the site, before the Reform Act, for the hustings at elections for the bor. St. Michael's is a large structure in the Norman style, with a handsome tower and spire between the nave and chancel. All-Saints is a Grecian building, with a turret, surrounded by six Corinthian pillars on a square pedestal. St. Mary's, also, is a modern structure, and its extensive burial-ground long served as a general cemetery for the town; but, within the last few years, a cemetery of 20 acres has been formed on Southampton Common. The R. Caths., Independents, Baptists, Wesleyan Methodists, and Jews have each places of worship; and there is a Friends' meeting-house. There are two chapels, one proprietary and one under trustees in connection with the establishment, and well-attended Sunday schools, with several day schools, supported wholly or in part by endowment. The grammar school, founded by Edward VI., has a small endowment: the premises have been rebuilt, and furnish accommodation for about forty boys, boarding with the head master. A hospital, called the *Domus Dei*, founded in the reign of Henry III., provides lodging, clothing, and a weekly stipend to four aged people of each sex. Among other valuable charities is one left in 1760 by the will of Alderman Taunton, which, besides providing for the instruction of ten boys, furnishes a stipend of 10*l.* a year for sixteen aged persons, and gives rewards to deserving female servants. It has also a female penitentiary, public dispensary, and lying-in charity, a royal humane society, several benefit societies, and a school of industry for fifty girls, founded in 1828 through the influence of Queen Adelaide. There are several religious societies, a literary society, a polytechnic institution with 400 members, an infirmary, and several news-rooms and subscription libraries. A regatta takes place every summer on Southampton Water, under the direction and patronage of the Southampton Yacht Club, and races are held in autumn on the common NW. the town.

Southampton Water affords good anchorage, and ships of 250 tons may load and unload alongside the town quay, close to which is the custom house. A pier of wood and stone, which projects about 400 yards from the shore, forms a convenient landing place for passengers from steamers, as well as a promenade for the inhabs. and visitors. It has a carriage-drive to its extremity. Docks, on an extensive scale, have, as already stated, been constructed, which contribute materially to the commercial facilities now enjoyed by the port.

Southampton has, in recent years, become a leading packet station. The Peninsular and Oriental Steam Navigation Company run the whole of their vessels from this port to Alexandria and Lisbon; and the Royal West India Mail-packet Company start their steamships from this port also, and have a graving dock on the banks of the Itchen for constructing and repairing ships. From its position on an inlet of the sea, stretching NW. from between Portsmouth and the Isle of Wight, at least 17 m. into the country, and which has been prolonged by means of the Itchen to Winchester, 12 m. inland, Southampton is the emporium of an extensive district, and consequently enjoys an extensive trade. On the 1st of Jan. 1864, there belonged to the port 136 sailing vessels under 50, and 110 above 50, tons; besides 14 steamers under 50, and 24 above 50, tons. The gross amount of customs' duties received at the port was 107,598*l.* in 1863. (Owing to her posi-

tion with respect to the opposite coast of France, Southampton has been for a lengthened period an important station for travellers to and from the continent. There are daily steamers for Havre, Dieppe, and other French ports, as well as for Lisbon and the Mediterranean.

Southampton was first incorporated in the reign of Henry I. Under the Mun. Reform Act it is divided into five wards, with ten aldermen and thirty councillors, from which forty members are chosen the mayor, sheriff, and two bailiffs. The mayor and bailiffs are the returning officers of the borough. Quarter and petty sessions are held under a recorder. There is a court for the recovery of debts to any amount, and a county court is established here. The borough has returned two members to the H. of C. since the 23rd Edward I., the right of election down to the Reform Act being vested in the inhabs. paying scot and lot. The electoral limits were left unchanged by the Boundary Act. Reg. electors, 4,354 in 1865. It is also the election town for the S. division of the co. Hants.

Southampton is said to have arisen out of the neighbouring Roman station *Clausentum*, E. the Itchen, which was succeeded by the Saxon *Hantune*, on the site of the present town. The castle, as already stated, was much enlarged by Richard II., who also strengthened the fortifications about the town and harbour. Henry V. set sail from this port, in August, 1415, at the head of the troops which, on the 25th of October following, gained the great victory of Agincourt. The inhabs. were actively engaged in the wars of York and Lancaster, in which the latter party was defeated with great loss. Its celebrity as a watering place dates from the middle of last century, when baths were erected, a chalybeate spring was discovered, and great additions were made by the formation of new streets and terraces, and the laying out of public gardens. The shores of Southampton Water, being richly clothed with wood and studded with villas, afford a succession of finely-diversified scenery, set off by the ruins of Netley Abbey, about 2 m. SE. from the town. This structure was founded in 1229, by Henry III., for Cistercian monks. The refectory and kitchen are in tolerable preservation; and there are some fine remains of the abbey church, which was cruciform, and had at its E. end a noble window. The whole is embosomed in wood, and near it is a modern tower, used as a tea-house, on the foundations of a fort erected by Henry VIII., commanding a fine view of Southampton Water.

SOUTH MOLTON (or MOULTON), a munic. bor., market town, and par. of England, NE. part co. Devon, hund. S. Molton, on an eminence near the confines of Exmoor, 12 m. E. by S. Barnstaple. Area of par. 6,160 acres. Pop. 3,830 in 1861. The limits of the munic. bor. and par. are co-extensive. The town consists chiefly of three streets, diverging from a spacious market-place. Many of the houses are good; streets well paved; the footpaths have been flagged, at a considerable expense, by the corporation. It is well lighted, and the public walks are kept remarkably clean. The par. church has some good monuments and a large organ. The living, a perpetual curacy, worth 157*l.* a year, is in the gift of the dean and canons of Windsor. There are free and charity schools; a guildhall, in which petty sessions are held every three weeks; and a gaol. The pop. is partly manufacturing, and partly agricultural: the manufactures are chiefly of coarse woollen cloth, but that of lace has been recently introduced, and the trade of the town is said to be increasing. (The town is situated on the N. bank of the Exe, about 12 m. E. by S. Barnstaple.)

in the 30th of Edw. I., but it does not appear to have subsequently exercised the privilege. It was chartered by Elizabeth and Charles II., and is governed by a mayor, ■ aldermen, and 12 councillors, the latter being elected for life among the resident inhabitants. About 3 m. NE. from the town is Castle Hill, the seat of Earl Fortescue.

SOUTHWARK. See LONDON.

SOUTHWELL, a market town and par. of England, co. Nottingham, Southwell and Scrooby liberty, on an eminence near the Greet, 13 m. NE. Nottingham. Area of par. 4,550 acres. Pop. 3,469 in 1861. The town is neat, well built, and well paved. It has a convenient suite of assembly-rooms and a theatre, but its principal building is the minster, or parish church. This, which is a large and magnificent edifice, is said to be, in part at least, as old as the time of Harold. Its extreme length is 306 ft., its breadth 59 ft., and the length of the transept 121 ft. The W. front has 2 lofty square towers, divided into 7 stories. There is a low massive centre tower, and a chapter-house on the N. side. The nave and transepts are Norman, the parts E. of the centre early English, and the chapter-house early Decorated. There are some perpendicular insertions, particularly a very large W. window. Within the church are the monuments of 5 archbishops of York. The chapter-house, which is light and graceful, has 16 prebends' stalls. 'The early English portions, which consist of the choir, its aisles, and small E. transepts, form one of the best examples of this style in the kingdom. The whole of this church deserves the study due to a cathedral; and though it be not so varied in its styles as some edifices, it claims attention for its purity and good preservation.' (Rickman's Gothic Architecture, p. 221.) The ruins of an ancient palace of the archbishops of York, the favourite summer retreat of Cardinal Wolsey, stand in the park, and a part is now appropriated as a sessions house for the liberty. The general bridewell for the county is at Southwell, which has also meeting houses for Wesleyans and Baptists, and a free-school, with 2 scholarships at St. John's Coll., Cambridge. What little trade the town possesses is chiefly in malt, hops, and tan. The living of Southwell is a vicarage, worth 144*l.* a year, in the gift of the prebendary of Southwell. Market days, Saturday; fairs, Whit-Monday and Oct. 21.

SOUTHWOLD, a sea-port, mun. bor., market town, and par. of England, hund. Blything, on an eminence on the E. coast of the co. Suffolk, about 1 m. N. from the mouth of the Blythe, 30 m. NE. Ipswich, and 94 m. NW. London. Pop. of munic. bor. 2,032 in 1861. The town consists principally of a long row of houses commencing near the bridge over the Bass Creek, and extending SW. to the edge of the cliff, besides numerous other houses with gardens, lying N. and S. of the principal street. Near the sea are several good houses, but the others are chiefly of an inferior description. The guildhall is a handsome stone building, and a new gaol was built in 1819. On the cliffs are two batteries, one of which has a parapet and 6 eighteen-pounders, but the other has only 2 guns. The church, built in the middle of the 15th century, is a fine edifice in the later English style, with a lofty tower and steeple of freestone intermingled with flint of various colours. The S. porch is extremely elegant, and above the clerestory roof is a light, open lantern. The interior is highly ornamented with gilding and carved work; and, on the whole, this is one of the finest churches in the co. The Independents, Baptists, and Wesleyan Methodists have each places of worship: the town, also, has ■ Sunday

schools and a national school. The retail trade of Southwold is trifling, but a somewhat more important traffic is carried on in the importation of coal and the exportation of salt (which is made here), and malt. The principal business, however, is connected with the influx of visitors, who resort to the town as a watering-place during the summer season, and for whose accommodation there are baths, reading-rooms, and a grand promenade. The entrance to the haven is by the river, and vessels trading to this port land their goods at Black-shore quay, about $\frac{1}{2}$ m. SSW. the town. The superintendence of the haven is vested in commissioners; and it has been improved by the erection of 2 piers at the mouth of the river, which has been made navigable to Halesworth, 8 m. W. by N. the town. The bor. of Southwold, which was incorporated in the reign of Henry VII., is governed under the Mun. Reform Act by a mayor and 3 aldermen, with 12 councillors. A court of record is established for the recovery of small debts, and there is a court of admiralty for the regulation of the port, which is subordinate to that of Yarmouth. Markets on Thursday: fairs, Trinity Monday and Aug. 24.

Southwold, or Sole Bay, E. of the town, is celebrated as the scene of the great naval engagement which took place on the 28th of May, 1672, between the combined English and French fleets, under the Duke of York (afterwards James II.) and Marshal de Estrées and a Dutch fleet under the famous De Ruyter. The action was most obstinately contested, the loss on both sides being very great and nearly equal. The Earl of Sandwich, who behaved with the greatest gallantry, was blown up along with his ship. The French suffered but little, in consequence, as is supposed, of their having received secret instructions to spare their ships.

SPA, a town and watering-place of Belgium, prov. Liège, on the borders of Rhenish Prussia, 14 m. SE. Liège. Pop. 4,778 in 1868. The town consists of a cluster of neat white houses, thrown into the form of two or three irregular streets and open promenades, the whole embowered amidst trees and gardens, and overhung on the N. and E. by a woody mountain range. It was at one period a place of great resort, and so highly distinguished for its mineral waters, that 'Spa' became a common name for mineral springs and bathing-places wherever found. One of its most distinguished patrons was Peter the Great of Russia, who frequently visited it. The *Pouhon*, or main spring, is a strong and active chalybeate, impregnated with carbonic acid gas, which gives it vivacity, and fits it for being preserved and sent in bottles to all parts of the world. There are several similar springs at from 2 to 3 m. from the town, at all of which there are pump-rooms, and to some baths are attached. Spa has all the usual structures of a watering-place, including reading-rooms and a theatre. There is also a Capuchin convent.

SPAIN (an. *Hispania*, Span. *España*, Fr. *Espagne*), an extensive and once powerful kingdom of S. Europe, occupying the E. and largest portion of its SW. peninsula; between lat. 36° 5' and 43° 30' N., and long. 3° 20' E., and 9° 10' W.; having NE. France, from which it is separated by the Pyrenees; N. the Bay of Biscay; W. Portugal and the Atlantic; and S. and E. the Straits of Gibraltar and the Mediterranean. Greatest length, E. to W., about 650 m.; greatest breadth, 550 m.

The kingdom, inclusive of the adjacent islands, is divided into 49 provinces, the area and pop. of which, and of the 12 ancient divisions, was as follows at the enumerations of 1846 and 1857:—





SPAIN & PORTUGAL

English Miles
10 20 40 60 80 100

AFRICA

| Provinces | Area in Eng. sq. miles | Population in 1846 | Population in May, 1857 |
|---------------------------|------------------------------|-----------------------|----------------------------|
| New Castile— | | | |
| Madrid . . . | 1,315 | 369,126 | 475,785 |
| Guadalajara . . | 1,946 | 159,044 | 199,088 |
| Toledo . . . | 8,774 | 276,952 | 328,755 |
| Cuenca . . . | 11,304 | 234,582 | 229,952 |
| Ciudad Real . . | 7,543 | 277,788 | 244,328 |
| Total . . . | 30,882 | 1,317,492 | 1,477,915 |
| Old Castile— | | | |
| Burgos . . . | 7,674 | 224,407 | 333,356 |
| Logrono . . . | | 147,718 | 173,812 |
| Santander . . . | | 166,730 | 214,441 |
| Oviedo . . . | | 434,635 | 524,529 |
| Soria . . . | 4,076 | 115,619 | 147,468 |
| Segovia . . . | 3,466 | 134,854 | 146,839 |
| Avila . . . | 2,569 | 137,903 | 164,039 |
| Leon . . . | 5,894 | 267,438 | 348,756 |
| Palencia . . . | 1,793 | 148,491 | 185,970 |
| Valladolid . . . | 3,279 | 184,647 | 244,023 |
| Salamanca . . . | 5,626 | 210,314 | 263,516 |
| Zamora . . . | 3,562 | 159,425 | 249,162 |
| Total . . . | 72,447 | 3,649,673 | 5,473,826 |
| Galicia— | | | |
| Corunna . . . | 15,897 | 435,670 | 551,989 |
| Lugo . . . | | 357,272 | 424,186 |
| Orense . . . | | 319,038 | 371,818 |
| Pontevedra . . . | | 360,002 | 428,886 |
| Total . . . | 88,344 | 5,121,655 | 6,250,705 |
| Extremadura— | | | |
| Badajoz . . . | 14,329 | 316,622 | 404,981 |
| Caceres . . . | | 231,398 | 302,134 |
| Total . . . | 102,673 | 5,669,675 | 6,957,820 |
| Andalusia— | | | |
| Seville . . . | 8,989 | 367,303 | 463,498 |
| Huelva . . . | | 193,470 | 174,391 |
| Cadiz . . . | | 324,703 | 383,078 |
| Jaen . . . | | 266,910 | 345,879 |
| Cordova . . . | 4,159 | 315,459 | 351,536 |
| Total . . . | 120,272 | 7,077,529 | 9,676,190 |
| Grenada— | | | |
| Grenada . . . | 9,622 | 376,974 | 441,917 |
| Almeria . . . | | 234,739 | 315,664 |
| Malaga . . . | | 338,442 | 451,406 |
| Total . . . | 129,894 | 8,027,734 | 10,885,177 |
| Valencia— | | | |
| Valencia . . . | 7,683 | 451,685 | 606,608 |
| Alicante . . . | | 318,444 | 378,958 |
| Castellon-de-la-Plana . . | | 199,022 | 260,919 |
| Murcia . . . | 7,877 | 280,694 | 380,969 |
| Albacete . . . | | 180,763 | 201,118 |
| Total . . . | 146,464 | 9,458,842 | 12,563,927 |
| Catalonia— | | | |
| Barcelona . . . | 12,180 | 442,473 | 713,734 |
| Tarragona . . . | | 283,477 | 320,593 |
| Lerida . . . | | 151,322 | 306,994 |
| Gerona . . . | | 214,150 | 310,970 |
| Total . . . | 157,634 | 10,499,764 | 14,216,218 |
| Aragon— | | | |
| Zaragoza . . . | 14,726 | 304,823 | 384,176 |
| Huesca . . . | | 214,874 | 257,839 |
| Teruel . . . | | 214,988 | 238,628 |
| Total . . . | 172,360 | 11,224,449 | 15,096,861 |
| Navarre . . . | 2,450 | 221,728 | 297,422 |
| Total . . . | 174,810 | 11,456,177 | 15,394,283 |
| Guipuscoa— | | | |
| Alva . . . | 1,082 | 67,523 | 96,398 |
| Biscay . . . | 1,267 | 111,436 | 160,579 |
| Guipuscoa . . . | 622 | 104,491 | 156,493 |
| Total . . . | 177,781 | 11,739,627 | 15,807,753 |
| Islands— | | | |
| Balearic Islands . . | 1,757 | 229,197 | 266,952 |
| Canary Islands . . | 3,220 | 199,950 | 227,145 |
| Total . . . | 182,758 | 12,168,774 | 16,301,850 |

The shape of Spain resembles that of a very irregular pentagon, the longest side of which faces the N. The coast line is, on the whole, pretty regular, without those great and sudden indentations that characterise the shores of many other countries, though an exception may be made as regards the coast of Galicia, which is fringed with bays and headlands, the principal among the former being the Bays of Betanzos, Pontevedra, and Vigo; and among the latter the Capes Estaca, Ortegal, and Finisterre. The other capes of Spain are principally on the coast of the Mediterranean. C. Tarifa abuts on the Strait of Gibraltar; and further N. are Capes Gata, Palos, La Nao, and Creux, the last being the extreme E. point of the peninsula. The surface is very much diversified, and intersected with mountains; but the whole may be described as a table land of considerable elevation, Madrid, the cap., being 2,173 ft. above the sea, which is the average height of the towns in the interior. Five chains of mountains are pretty clearly defined, running from E. to W. through the peninsula. 1. The range of the Pyrenees, not only divides France from Spain, but runs in a continuous chain parallel to, and at a short distance from, the N. shore, upwards of 600 m. as far W. as C. Finisterre. The E. division is known as the Pyrenees properly so called, the W. portion consisting of the Asturian Mountains: the highest point in the former is the Pic de Netore on Mount Maladetta (11,424 ft.), and in the latter the Peña de Peñaranda, SW. of Oviedo (11,081). 2. A range extends WSW. from the Ebro, near Tudela, dividing Old and New Castile, Leon and Extremadura, and thence running SSW., through Portugal, to Cape Roca, near Lisbon: the culminating point is the Sierra de Grados (10,552 ft.), at the SW. angle of Old Castile; but the average height does not exceed 4,500 ft. 3. A chain branching SW. from that last mentioned divides the basin of the Tagus from that of the Guadiana: the central portion, S. of Toledo, called the Sierra de Guadalupe, attains a height of 5,110. 4. A range, called the Sierra Morena, runs along the S. border of La Mancha, in New Castile, which, though not continuous, and of no great extent, forms the water-shed between the Guadiana and Guadalquivir. 5. The Sierra Nevada runs from C. Palos, near Carthagen, almost as far as Cadiz: it is at no great distance from the Mediterranean, the most elevated part being SE. of Granada, where the Cerro de Mulahacen rises 11,660 ft. above the sea: the peak of Veleta is 11,385 ft. in height; and further W. the Serrania de Ronda attains an elevation of 6,011 ft., while the neighbouring town of Ronda is about 3,300 ft. above the sea. (See Essay on the Phys. Geog. of Spain, in Laborde, *Itinéraire d'Espagne*, vol. v. last ed.; Bruguière, *Orographie de l'Europe*; Berghaus, *Erdbeschreibung*, p. 316-318; Antillon, p. 226-270. The altitudes are given exclusively from Bruguière.)

The mountain-chains now described regulate the course of the principal rivers, some of which are of great extent, and have numerous tributaries. Immediately S. of the Pyrenees is the Ebro, which, rising on the Asturian range, near Reynosa, runs SE. through a succession of narrow valleys, receiving its chief tributaries from the S. face of the Pyrenees, and flows into the Mediterranean about 26 m. below Tortosa: its entire length somewhat exceeds 400 m., and the area of its basin is estimated by Berghaus (*Erdbeschreibung*, p. 237) at 25,860 sq. m. Among the other rivers flowing into the Mediterranean are the Guadalquivir and Jucar, falling into the Bay of Valencia, and the Segura in Murcia: the rest are unimportant. Five

large rivers run westward into the Atlantic Ocean. The most N. of these is the Minho, which rises in the Asturian Mountains, and running first S. and then SW., enters the sea a little below Caminha, after a course, including its windings, of about 150 m. The Douro rises in the mountains of Old Castile, a few miles N. of Soria, and takes a generally W. course, by Aranda, Tordesillas, and Zamora, as far as Miranda, where, turning southward, it forms a portion of the boundary of Portugal, through which it flows westward into the sea close to Oporto: its length is estimated at 500 m., and the country drained by itself and tributaries somewhat exceeds 34,000 sq. m. The Tagus has its source in the Sierra de Albarracin, in Aragon, whence it flows WSW. by Aranjuez, Toledo, Talavera, and Alcantara, to the confines of Portugal: it then turns SSW., and, after expanding into a fine estuary, enters the Atlantic, a little below Lisbon, built on its N. bank. The Tagus has numerous important tributaries, the chief of which are the Henares, Alberche, Alagon, and Zatas, the last being in Portugal: the extent of its basin is estimated at 29,000 sq. m. The Guadiana, rising in La Mancha, runs first NW., then W. as far as Badajoz, where it curves southward, and enters the sea at Ayamonte, after a course of 420 m.; it has several pretty large tributaries, and drains an area of about 25,600 sq. m. The Guadalquivir, which, with its tributaries, drains a large portion of Andalusia, rises in the Sierra de Alcaraz, and taking a SSW. direction by Andujar, Villafranca, Cordova, and Seville, turns southward, and after crossing a low, unhealthy swamp, enters the Atlantic at San Lúcar, after a course of 320 m.: its largest affluent is the Genil, and the area of the entire basin is nearly 18,000 sq. m. But, with the exception of those portions of the Douro and Tagus within the limits of Portugal, these rivers, notwithstanding their length, offer few advantages for navigation, owing to the rocks, shallows, and falls with which they are encumbered.

The Ebro has, however, been made navigable to a considerable extent by means of the Canal of Aragon; and the channel of the Tagus is also in course of being improved, so as to make it accessible for boats as far as Aranjuez. Vessels of 100 tons ascend the Guadalquivir, within about 8 m. of Seville. The rivers on the N. side of Spain are comparatively insignificant, owing to the closeness of the Asturian Mountains to the sea: one of these, the Bidassoa, forms the dividing line between France and Spain. There are no lakes of any considerable size, though in the Pyrenees and other chains there are several small mountain-lakes. Swamps and morasses, however, are both numerous and extensive; the principal being the Gallocante, in Aragon; the Nave, near Palencia; and the Lagunes of Palomares and Caldera.

A central band of granite and mica-schist stretches along the Pyrenees from the Mediterranean to the Bay of Biscay, flanked successively by beds of secondary and cretaceous formations: the primary rocks, however, are by no means so extensive as in the Alps, and do not extend westward beyond the Bidassoa, all the mountains of Asturias and Galicia being of the sandstone and carboniferous limestone that form the lower parts of the main chain. The lofty range that divides the two Castiles, and forms the watershed between the Douro and Tagus, consists chiefly of granite and other primary rocks, which pass eastward under the sandstone, forming the lofty uplands of Soria, in Old Castile: it is flanked on both sides by sandstone and limestone; but in New Castile are extensive beds composed of the *débris* of pri-

the marly subsoil being remarkable for the fertility of the surface, whereas the gypseous districts are remarkable for their barrenness and dismal appearance, such as is exhibited in the neighbourhood of Madrid. The Sierra Morena also exhibits a large proportion of primary rocks, partly covered by secondary and other rocks, with the nature of which we are but little acquainted. The Sierra Nevada is a mass of mica-slate and serpentine, flanked northward by secondary and more recent rocks, containing some of the richest marbles of Spain, many of which adorn the churches of Granada and Seville: the S. side, forming the deep valleys of the Alpujarras, is principally of secondary limestone resting on slate (highly metalliferous), greenstone, and blue limestone. The limestone strata of the Sierra de Gador are remarkable for lead mines, which are extremely rich, and sufficient to supply the whole of Europe with this mineral for many centuries to come. With respect, indeed, to the mineral wealth of Spain, there can be little doubt that it is very great, and by no means exhausted by the workings of the ancients. There are valuable copper-mines in the Sierra Morena and the Alpujarras, and near Teruel in Aragon. Quicksilver is found at Almaden, on the N. side of the Sierra Morena, and graphite occurs near Marbella, in the neighbourhood of Malaga. Graphite is found, also, in the high Pyrenees, scarcely inferior to that of Cumberland, but wholly unwrought. Sulphur occurs in several parts of Valencia, and saltpetre, alum, and salt are found in many parts of the country. Iron and coal abound in the mountains of Biscay and Asturias, and are wrought to a considerable extent; besides which there are extensive iron mines, with smelting-houses, &c., at Marbella, near Malaga, and in the Sierra Morena, near Pedroso. Coal occurs, also, in large seams throughout Aragon and Catalonia, as well as on the Guadalquivir near Seville; and traces of the same mineral have been discovered near Malaga.

The soil of the peninsula exhibits great diversities. The central region consists for the most part of arid, unsheltered plains either of sand or gypsum, intersected with lofty mountains, which reflect with intolerable fierceness the scorching heat of summer, and sharpen into more intense keenness the intense cold of winter. The lower region of the coast, sloping gradually towards the sea, is broken into an alternation of mountains and valleys, producing the most agreeable variety, and presenting a pleasant contrast to the bleak and barren sameness which characterises the central region. It is everywhere fertile, or may be rendered so by irrigation. The alluvial soil of Old Castile is tolerably productive, even without irrigation: New Castile has every variety, from the gypseous marl composing the poor soil about Madrid, to the red marl of Guadalaxara and the limestone of Arganda. The valleys of the Sierra Morena, and the whole of Estremadura, have a soil formed of detritus from primary rocks, and cannot be excelled in beauty and natural fertility. The soil of Andalusia is chiefly of marl and clay interspersed with red sandstone marls, and it is by irrigation only that it can be made productive. The Vega of Malaga, however, is naturally of surprising fertility, owing partly to the long establishment of irrigation, but partly, also, to the fact of its being in a great measure alluvial. Valencia has a poor ungrateful soil, yielding crops only by forced cultivation, and the use of water. In Catalonia and Aragon the detritus of limestone is found alternating with fine red marls and waste tracts of gypseous marls, similar to those near

Morena and the Alcarria, the provinces of Toledo and Guadalaxara, the Vega of Malaga, and the country between Gibraltar and Cadiz, would probably repay the labours of agriculture better than other parts of Spain.

The *climate* of Spain is greatly diversified, being modified by the physical conformation of the country. The temperature of the air always varying less near the coast than in the interior, is much more equable in the maritime than the other provs. On the N. and W. coast westerly winds prevail; and, being loaded with moisture from the Atlantic, discharge abundant rains in winter and spring. The coast of the Mediterranean has a calmer atmosphere, with a prevalence of E. winds, and a temperature generally rising above 57° Fahr., and seldom descending so low as 32°. Winter, indeed, is almost unknown on a coast sheltered by the elevated land of the interior, and warmed by the rays of a cloudless sun; while the heat of summer is very great, and would be all but intolerable, were it not lessened by the sea breeze, which lasts during the greater part of the day. On the plateau of Castile, the mean height of which, according to Bruguière, about 1,960 ft. above the sea, heat accumulates much more slowly, and it is only during the month of July that the temperature ascends as high as 77° Fahr. In August, the mornings and evenings begin to be cold, and in winter the severity of its climate forms a very striking contrast with the heats of summer. Except in the N. provs., the climate of Spain is everywhere remarkable for dryness; a freedom from rain and a cloudless sky being advantages that may generally be counted on; but this dryness occasionally becomes so excessive that the rivers are dried up, vegetation destroyed, and men and animals die miserably of thirst. (For. Quart. Rev., ix. 153.) Two kinds of winds are very troublesome in Spain. The *gallego*, a N. and NW. wind, which comes down from Galicia, is very cold and piercing; causing, besides other diseases, painful affections of the eyes, often ending in blindness, which is very common in all the more elevated districts. This ophthalmia, however, is attributed by some writers to the vast quantities of minute nitrous particles blown up from the waste lands, and held in suspension by the wind. (Faure, *Souvenirs du Midi*, p. 5-8.) The S. provs. are visited by the *solano*, which, like the *sirocco* of Italy, relaxes the system, and produces giddiness, inflammation, and even death. Owing to its extreme and sudden variations, the climate of the central plateau is far from healthy. The Madrid colic is always dangerous, and often fatal to strangers; besides which there is a general tendency to pulmonary consumption, and other diseases of the lungs. Scrofulous diseases are even more common than in Russia, and epilepsy is by no means rare. The yellow fever, which often ravages the S. provs., has created much discussion among physicians, some of whom treat it as epidemic, while others are of opinion that it is brought to Spain by infection. Insanity prevails more or less in all parts, but especially in the provs. bordering on the Mediterranean.

The *mineral products* of Spain are rich and various, and might certainly be made the source of vast wealth. By a curious coincidence Spain itself was to the ancient what its American possessions have been to the modern world, the principal source of the supply of the precious metals. It is exceedingly doubtful, however, notwithstanding the numerous statements to the contrary, whether the Carthaginians or Romans ever discovered any mines of gold and silver in Spain. The more probable opinion seems to be, that the gold was

wholly obtained from washings; and that the silver, which was by far the more abundant and important product, was extracted from the lead, which was then raised, partly for the sake of the silver, in vast quantities. (Antillon, *Geografia*, 149.) The mine of Guadalcanal, the only one of silver that is now wrought, was, with that of Cazalla and others, discovered long after Spain had been evacuated by the Romans.

The most valuable of the existing Spanish mines are those of lead in Granada; and the supplies obtained from them during the last 20 years have been so large, that they have occasioned the abandonment of several less productive mines in other countries, and a considerable fall in the price of lead. The quicksilver mines of Almaden, in La Mancha, are also extremely productive, and supply, indeed, most part of the quicksilver imported into this country, and large quantities for the New World. Exclusive of innumerable salt springs, there are mines of rock salt at Migranilla, in La Mancha, and the mountain of Cardona. In Catalonia, 17 m. NW. Monserrat, is a vast and solid mass of pure rock salt. The iron trade will be afterwards referred to: copper, tin, antimony, and other minerals are found in various parts of the country, with every variety of marble, and the finest building stone. There can, indeed, be no doubt, that, under a government capable of developing the national resources, the mineral wealth of Spain would be found to be equal, if not superior, to that of most other countries.

Vegetable and Animal Products.—The wheat of Spain, though of very various qualities, is generally excellent, and its bread is said to be the best in Europe. In some districts the quantity grown is insufficient for the consumption, the deficiency being made up from the surplus produce of other provs., or by importation, though, owing to the badness of the roads, and the consequent difficulty and cost of carriage, there is often a great difference in the prices of corn in markets at no great distance from each other. Wine is raised abundantly throughout the country; and the coast districts of Xeres, Rota, Malaga, Benicarlo, and Alicante, furnish large quantities for exportation. The wine of the interior, though seldom exported, in consequence of the bad roads and expense of transport, is sometimes of good quality; and that of Val de Peñas, in La Mancha, in particular, a dry red wine, has obtained a high reputation for its superior flavour and delicacy. Grapes are also exported both in a fresh and dried state. Among the other productions of the soil are oats, barley, maize, rice, oil, sugar, hemp, flax, *esparto* or sedge, cotton, saffron, barilla, honey, and silk, with all the European vegetables, and some even of those of the warmer regions.

The fruits of the S. are lemons, bitter and sweet oranges, pomegranates, dates, olives, almonds, and pistachio nuts; apples, pears, cherries, peaches, and chestnuts are grown in the N. provs. Immense quantities of hazel nuts are exported from Catalonia, and the fruit of the carob-tree is used for feeding cattle. On the Pyrenees, Asturian Mountains, the Sierra Morena, &c. are luxuriant forests; but, on the whole, Spain has less timber than any other extensive country of Europe; a circumstance owing, not to any inaptitude of the soil for the growth of forest trees, but to an inveterate and inexplicable prejudice of the people against trees, which are mercilessly cut down or destroyed before they attain any considerable size. Indeed, so universal is this propensity in the central provs., that the most rigorous measures are necessary to preserve the avenues of Aranjuez from wanton destruction; and all statutes for the

encouragement of planting have signally failed of their object. Spain has eight varieties of oaks; among which are the evergreen oak, or *Quercus ballota*, which has edible acorns, in taste resembling chestnuts; the cork oak (*Q. suber*), and the cochineal oak (*Q. coccifera*), on which is found the false cochineal, yielding a fine crimson dye. The true *Quercus robur*, however, which furnishes the best materials for ship-building, scarcely exists, except in the N. provs. Among the other forest trees may be enumerated tamarisks, pines, beeches, chestnut trees, nut trees, firs, poplars, and the sumach (*Rhus coriaria*), the bark of which is used for tanning.

Among the animal products of Spain, the horse is entitled to particular notice. The Arabs, when in possession of the country, stocked it with their finest breeds; and though the race has degenerated, it still shows many of the points by which it was originally distinguished. In beauty, grace, and docility, the horses of Andalusia are said to be superior to those of England; but it may be doubted whether they are equal to the same amount of labour. In fact, the number of good horses is rapidly decreasing in Spain, chiefly owing to the preference given to mules for domestic and agricultural purposes: the importation of horses to improve the breed, and the exportation of colts, are alike forbidden; and the number of horses bred at present is quite inconsiderable, notwithstanding the decrees, premiums, and encouragements of every kind that have been offered by government. The celebrated breed of the sovereigns of Spain at Cordova is nearly extinct; in the Serrania de Ronda (once the Cleveland of Spain) only miserable animals, called *serranos*, are now reared: the wealthiest Andalusian nobles have only 2 or 3 indifferent saddle-horses, and there is scarcely a horse in the whole country fit for the draught of artillery. Great numbers of mules are bred in Old Castile, being sent to come to their full size in the rich pastures of Estremadura, whence they are supplied to the rest of Spain. The asses are very different animals from those seen in England, being of a large size, carefully bred, and in strength, docility, and sure-footedness, nearly equal to the mules. Cattle are small, and not of fine appearance. The bull of Andalusia is found wild in the Sierra Morena. Hogs are bred in vast numbers, and those which feed on acorns are celebrated for the delicacy of their meat, which is, perhaps, unequalled. Sheep, however, are the favourite stock of Spain, and are everywhere raised in considerable numbers, nor are there wanting wild animals, such as wolves, lynxes, wild cats, wild boars, and foxes. The bear, which used to be common two centuries ago, is now found only in the Pyrenees. Monkeys are met with in the Sierra de Ronda, besides which there are various reptiles, as chameleons, lizards (some 2 ft. in length), vipers, and snakes. Among the birds may be noticed several species of vultures, falcons, owls, ravens, magpies, Cornish choughs, partridges, quails, bustards, and plovers.

Agriculture.—'No country in Europe,' says Laborde (*Itinéraire d'Espagne*, vol. iv.), 'is so generally fertile as Spain, or has equal advantages at all seasons of the year. Spain, after its conquest by the Romans, became the granary of the Roman empire. Under the Goths, vast canals and sluices were formed for irrigating the land, and the amount of corn then raised was sufficient not only for the home supply, but also, to a considerable extent, for exportation. Agriculture under the Moors was in a still more flourishing state; for when they invaded the country, they carried with

uncultivated lands, augmented the number of plantations, carried the art of irrigation to a degree now scarcely attainable, introduced the culture of rice, and greatly improved the breed of horses: in fact, every kind of production was increased under their improving hands; and the era of their expulsion designates the epoch of the decline of agriculture. The Spaniards, thus deprived of the assistance of the Moors, were compelled to till the land themselves; but for such pursuits they possessed neither talents, activity, nor patient industry. Hence the whole system fell into a state of languor, from which it has, owing to several causes, never recovered.'

The passage just quoted states, in a few words, what has long been the popular opinion in regard to the ancient as compared with the modern state of Spain. It, however, is wholly erroneous. The fertility of the country has been greatly exaggerated; and it is doubtful whether her agriculture was ever in so advanced a state as at this moment. A great portion of Spain is, owing to the heat of the climate and the want of water, wholly unfit for husbandry; and she has, in consequence of the frequency of droughts, been at all times subject to the most destructive famines. Owing to the numerous ridges of mountains by which she is intersected, her internal commerce has always laboured under the greatest difficulties; and there is no evidence that her artificial communications, that is, her roads, canals, and bridges, were at any former period in a more improved state than that in which they are now. Owing to vicious institutions, bad government, and other causes, Spain has, for a lengthened period, continued stationary, or made but little progress, while other nations have advanced with giant steps in the career of improvement; but there is no real foundation for the prevalent notion of her having been comparatively well cultivated, rich, and industrious previously to the expulsion of the Moors, or in the reigns of Ferdinand and Isabella and Charles V. Capmany, in his '*Questiones Criticas*' (cap. i.), has proved, beyond all controversy, that there were in the 15th and 16th centuries the same complaints of the wretched state of agriculture, of the idleness of the Spaniards, of their contempt for industry and the useful arts, and their dependence on foreigners, that are still made against them. It is needless to say, that without tranquillity and good order there can be nothing like a flourishing agriculture. But at the very time that it is said to have been most flourishing, that is, previously to and during the reign of Ferdinand and Isabella, the Spanish historians represent the country as a prey to rapine, outrage, murder, and every sort of violence and disorder. Indeed, so early as the 13th century, the principal cities of Aragon and Castile had formed an association, called the *Santa Hermandad* (Holy Brotherhood), for their mutual protection against the robbers and plunderers with which the country was infested; and during the reign of Ferdinand and Isabella this institution was still further extended. (Robertson's *Charles V.*, vol. i. note 36.) And if these facts were not enough to demonstrate the entire worthlessness of the statements as to the flourishing state of agriculture in Spain previously to the expulsion of the Moors, the organisation of the laws respecting the *mesta* (migratory flocks) would sufficiently evince the truth of what has now been advanced; for had the country not been at the time in a half-occupied, semi-barbarous state, every one must see that the oppressive privileges conferred on the owners of the sheen never could have been carried into effect, or

Having thus briefly disposed of the apocryphal statements as to the former flourishing state of agriculture in Spain, we have now to inquire into its present state, and the circumstances to which its long-continued depression are principally to be ascribed.

With the exception of a few districts which have peculiar facilities for irrigation, agriculture, at present, is in the most backward state imaginable. Great part of the land is not tilled, and that which is tilled is executed in so careless and slovenly a manner, as to produce a starved crop of corn in spots where they might command the most abundant harvests. The corn is usually choked up with stones, filth, and weeds of every kind. Generally speaking, tillage farms are small, and rents low; but owing to the exorbitant taxes, and other expenses wholly exclusive of rent, the farmers are wretchedly poor, and, when they require money, are obliged to obtain it at exorbitant interest, by mortgaging their crops. The system of letting land is various, money rent being taken in some parts, while in others the rent consists of a stipulated quantity of produce, and in others the *metayer* system prevails. Generally, however, large estates are not let out in farms, but are managed by agents, who, for the most part, are totally ignorant of the business of agriculture, and whose great object is to squeeze out of the land all that it can be made to produce by the most compendious processes. Farm-houses are rarely seen, except along the E. coast. The farmers live in huts of the meanest construction, crowded together in villages, so that farm buildings, often so expensive in other countries, cost almost nothing. Spring corn is generally sown on the ground before it has been turned up, and is still covered with the winter weeds; and is then ploughed down, or rather scratched in with a miserable instrument, and left to nature. Owing to the dryness of the climate, this is a less ruinous system than might have been supposed, for when the heat sets in the corn ripens, while the weeds perish. When ripe the corn is gathered in the field, and after being thrashed or trampled out by mules and asses, is left in heaps on the ground till it is sold. The corn speculators of Castile preserve grain in *silos*, or subterranean caves, sometimes for five or six years, or till a market opens for it. Public granaries, or *positos*, are, also, established in most districts, where corn may be warehoused till it can be disposed of. The implements of husbandry are of the rudest description: it is not uncommon in the S. to see men returning from plough seated on a mule, to the sides of which their whole apparatus is tied: the use of fanners is unknown, except in the neighbourhood of sea-port towns, to which they have been imported from England: corn is winnowed by throwing it up in the air, and it is more frequently ground by hand, than by either wind or water mills. Land is not supposed to yield to the proprietors more than $1\frac{1}{2}$, or at most 2 per cent.; for, when the tenant has paid the direct taxes that fall upon the land, little more remains than half the produce, to pay both rent and labour. It is exceedingly difficult to estimate the rent of land by the English acre, from the great uncertainty and irregularity of the measures. The term *fanegada* is used to indicate the extent of land on which a *fanega* of wheat may be sown, an extent which varies in every village: this quantity of land, whatever it may be, lets, according to circumstances, at from 12s. to 24s., the average value of a *fanega* of wheat being about 3s. 6d. Vine and olive-lands are measured by the *arrea*, an equally vague standard.

The wages of farm labourers average about 13d. *per diem*; or, if boarded with their masters, from 6½d. to 10d. But, though tillage has been greatly extended during the present century, it is still true that in most parts of Spain no improvement has been made during the last 150 years. The principal exceptions are in Biscay, Navarre, and Aragon. In the first hoe and spade husbandry pretty generally prevails, and every inch of arable ground near the roads seems to be carefully cultivated. The wheat raised in Biscay perhaps exceeds the consumption of the district, and considerable crops are also raised of rye, maize, barley, and oats. In Leon, Castile, and Andalusia, agriculture, which is in the most degraded state, is confined to the growth of wheat.

The most careful cultivation is found in the *huertas*, or irrigated lands of Granada, Murcia, and Valencia. These tracts, indeed, are considered as the gardens of Spain, and abound not only with every variety of fruits, but all kinds of vegetables and plants, useful either as food or materials for manufactures. The mild red pepper raised in the *huerta* of Murcia is celebrated all over Spain, and forms a considerable article of trade with the interior. Rice is the chief product of Valencia. The sugar-cane of Granada and Valencia is as good as that of the West Indies; but it is cultivated at much greater expense, and its growth has, in consequence, been almost wholly abandoned. Considerable quantities of corn are raised in different parts along the S.E. coast. Mulberry-trees are carefully cultivated in the S. provinces; those of Murcia and Valencia are white, those of Granada black. In the cultivation of vines poles are not used, but the cuttings are planted, and not being permitted to attain any great height, gradually form thick and very stout stocks. Espaliers, also, are numerous, especially in Andalusia, and the grapes on these vines attain an extraordinary size, the bunches often weighing from 12 to 14 lbs. The rich level lands produce the largest quantities of wine, but here, as elsewhere, that raised on gravelly soils on the hilly slopes is the best. The quality of the wine varies greatly in different districts; but it may be said with truth that, except the wines of Xeres, Rota, Malaga, Alicante, and Benicarlo, which are intended for exportation, few of the Spanish wines are equal even to those of third-rate quality in France. Being very generally kept in skins, smeared with pitch, they acquire an *olor de bota*, or peculiar taste, and a flavour not disliked by the natives, but very disagreeable to foreigners. 'It is surprising,' remarks the British consul at Cadiz, in a report on the wines of his district (Commercial Reports received at the Foreign Office, London, 1865), 'that when so much trouble is taken to prepare sherry for the foreign market, the Spaniard should be content with such inferior and ill-made wines as are found in the neighbourhood of really good vineyards.'

The Pyrenees, the hilly parts of Biscay and the Asturias, the vast plains of Andalusia, the two Castiles, Estremadura, and Leon, are almost wholly in pasture; and in some parts the traveller may journey for many miles without seeing either a house or an individual. In point of fact, however, half the pastures really consist of heaths, or of neglected tracts covered with thyme and other wild herbs, that at present are next to worthless. There are few or no irrigated meadows, and hay is seldom or never prepared for fodder. Indeed, notwithstanding the preference given to pasturage, and the privileges that have been long enjoyed by the *ministros*, the *haciendas* of the crown are in a state of ruin.

comparatively small. The following table gives the numbers, according to official returns of the year 1860 :—

| Description | Number |
|------------------------|------------|
| Black Cattle | 1,869,148 |
| Horses | 382,009 |
| Mules | 665,472 |
| Asses | 750,007 |
| Sheep | 17,592,538 |
| Goats | 3,145,100 |
| Swine | 1,608,203 |
| Camels | 1,861 |

The Spaniards distinguish their sheep into the sedentary, or those who remain in the same place during the year; and the migratory, or those who move from place to place. The latter, or *transhumantes*, consisting chiefly of the Merinos, or fine woolled breeds, are depastured during winter in the vast plains of Andalusia, Castile, Leon, and Estremadura; and are driven in summer to the nearest mountains. These migratory flocks are collected for their journeys in large bodies of 10,000 and upwards, called *mestas*, their peregrinations being regulated by a peculiar code of laws, and by immemorial custom. It is obvious that this migratory system has originated in natural causes; and that, in fact, it is an important branch of the rural economy of Spain. In winter, when the mountains are covered with snow, the plains are in the greatest verdure and beauty; and in summer again, when the herbage of the plains is withered and burnt up by the heat and drought, the pastures of the sierras, and other mountain tracts, are in a state of comparative luxuriance. Nothing, therefore, can be more natural than this shifting of the flocks: it is for the mutual interest of the occupiers of the hills, and those of the plains, and no doubt has prevailed in Spain from the remotest antiquity, and will necessarily continue to prevail.

The laws and customs, however, under which the migrations of the flocks are conducted, have been, for a lengthened period, singularly inexpedient and oppressive. It appears that, about the middle of the 14th century, the depopulation of large tracts of country by a pestilence gave a considerable extension to pasturage, and enabled the proprietors of the migratory flocks to usurp certain privileges, which they have since succeeded in maintaining. Thus they are not only allowed to drive them over village pastures and commons, but the proprietors of such cultivated lands as lie in their path are obliged to leave for them a wide path, and, which is still worse, no new inclosures can be made in the line of their migrations, nor can any land that has once been in pasture be again cultivated till it has been offered to the mesta at a certain rate. In consequence of these perverse arrangements, disputes, which frequently terminate in bloodshed and murder, are perpetually taking place between the herdsmen and those through whose lands the flocks have to pass. However, it is possible that the mischiefs said to be entailed on Spain by the laws and customs in question have been a good deal exaggerated. As already seen, the migration of the flocks is essential in Spanish rural economy; and it does not appear, were government to set resolutely about the matter, that any insuperable difficulty would have to be encountered in defining and fixing the roads to be taken by the flocks, and in otherwise regulating their migrations, so as to prevent them

introduction of a flock of sheep from England, in 1394, being a portion of the dowry brought by Catherine, daughter of the Duke of Lancaster, to her husband, the eldest son of the king of Castile. (*Questiones Criticas*, 9; and *Memorias Historicas sobre la Marina y Comercio de Barcelona*, iii. 386.)

The low state of agriculture in Spain may be ascribed partly to physical and partly to moral causes. At the head of the former must be placed the heat of the climate and the aridity of the soil. Most part of the rivers with which the country is intersected run in deep beds, and are but little available, except in a few favoured localities, for purposes of irrigation. Probably, however, moral have had still more influence than physical causes in retarding the progress of agriculture in the peninsula. At the head of the former must be placed the vast extent of the lands belonging to the nobility, clergy, and corporations. It is affirmed that the estates of three great lords—the dukes of Osuna, Alba, and Medina Cœli—cover nearly the whole of the immense province of Andalusia, and several in the other provinces are hardly less extensive. These vast possessions have been uniformly held under strict entail; and, speaking generally, are all managed by stewards, anxious only to remit money to their masters, who are frequently in embarrassed circumstances. The younger branches of the great families, though they inherit all their pride, inherit little or none of their wealth. They are, for the most part, exceedingly ill-educated; and when not employed in government service, pass their days in a state of slothful dependence. It is singular, notwithstanding their immense possessions, that the Spanish grandees have little or no taste for a country life, or for the improvement of their estates; and the fact is that, from the one end of the peninsula to the other, there is no such thing as a fine country seat. The great estates belonging to the corporations, or towns, are held in common; and in consequence are wholly, or almost wholly, in pasture. Luckily, however, the large estates that belonged to the church have been confiscated during the late revolutions; and their sale and division have materially increased the number of smaller proprietors, and given a stimulus to improvement; and a stop has also been put to the practice of entailing. The interruption given to labour, by the immense number of religious festivals and saints' days, has, also, been exceedingly injurious to agriculture and all sorts of industry.

The Spanish character is also unsuitable to success in agriculture and manufactures. During the prolonged struggle with the Moors, a taste for daring adventures, and for an irregular, predatory mode of life, was widely diffused throughout the nation; and the discovery and conquest of America, which occurred nearly at the same time that the power of the Moors was annihilated by the conquest of Granada, afforded a new and boundless field for the exercise of the peculiar taste and talents formed in the Moorish wars. In addition to the means thus afforded of arriving at wealth and distinction by a more compendious and less laborious, though more hazardous, route than that of sober industry, these honorary distinctions, of which the Spaniards are extremely fond, were conferred only on those who followed the profession of arms, and who could show that their ancestors had not degraded themselves by engaging in the debasing pursuits of agriculture, manufactures, and commerce. And while the higher and more as-

of convents and similar establishments afforded the means of keeping a vast number of individuals in pampered idleness.

There are several societies in Spain, assuming the title of 'Friends of the Country,' for the encouragement of agriculture and the arts: most of them were founded in the reign of Charles III., and were warmly patronised by Campomanes, the most enlightened minister of whom Spain has to boast, and by Count Florida Blanca. Hitherto, however, they seem to have rendered but little service, if we except that of Madrid, to whose exertions the famous Memoir of Jovellanos ('Informe de la Ley Agraria') is principally to be ascribed. The reader will find this memoir in an English dress in the 4th volume of the translation of the 'Itinéraire' of Laborde.

Manufactures.—It might have been expected, from the abundance of wool and silk in Spain, and her extensive colonies in America, that her manufactures would be in a comparatively flourishing state. This, however, is not, nor has it ever been, the case. Capmany and other able writers have shown that the statements as to the flourishing state of manufactures in Spain, in the 14th and 15th centuries, have no better foundation than those respecting the flourishing state of agriculture and the magnitude of the pop. at the same period. Some of the circumstances that have contributed to depress agriculture have also contributed to depress manufactures; but they have also been affected by others of a peculiar description, among which may be specified the oppressive influence of the *alcabala*, and other taxes, corporation privileges, monopolies on the part of government, and the want of competition and emulation through the exclusion (in as far as practicable) of foreign manufactured goods. Catalonia, Biscay, and Valencia are the most industrious provinces, and in them manufactures are most advanced. Those of silk and cotton, especially the first, are carried on to a considerable extent in Barcelona, Valencia, and other towns; but though the fabrics be excellent, the colours are wretched. The blonde mantillas of Almagro, in La Mancha, are perhaps the best of the Spanish manufactured articles. Broad cloth is made at Alcoy, in Valencia, and coarse cloths (*pano pardo*) are extensively manufactured in Catalonia, and in various districts throughout the country. But, with the exception of silks, all the woven fabrics produced in Spain, whether woollens, cottons, or linens, are at once badly finished and enormously dear: even the coarse, hard-spun *muntas*, that serve the muleteers for cloaks and blankets, fetch prices that would astonish the peasantry of England and France. In the N. provs. tanning is the most important branch of manufacture, furnishing the principal supply of leather for the interior: the business was introduced by, and is chiefly in the hands of, refugee Basques from the French side of the Pyrenees. The few tan-works of Andalusia are mostly in the hands of Englishmen. The manufacture of paper and hats has been established with some success, and there are numerous potteries, though the products are principally of coarse quality. In Valencia and Catalonia, however, finer articles are made; but even there the art is only in its infancy. There is a royal porcelain manufactory at Madrid, on the plan of that of Sèvres, occasioning, like its prototype, a constant loss. Soap is made on a somewhat extensive scale in various parts of Spain, that of the best quality being exported. In Biscay the production and manufacture of iron has been for many years conducted with considerable activity; and it is probable that the depression occasioned by

the late civil war, of which Biscay was the principal seat, has already been removed. It is impossible, however, that the iron trade of Biscay, how abundant soever the ore, can rise to any great importance, since wood fuel is scarce, and coal, being at a considerable distance, is little used; while English coal, which might be procured at about one-third the price, is almost prohibited. Still however, to some extent at least, in almost every village of the prov., the ironware manufacture is carried on. Horseshoes and nails, coarse locks, guns, and bedsteads, are the leading articles with which the Biscay manufacturers supply the interior: large copper utensils are also made on a considerable scale in this part of Spain. Muskets, pistols, and sabres are manufactured by the government in Valencia; and several minor establishments exist at Saragossa, Barcelona, Malaga, Cadiz, and Seville. Sword-blades of the finest temper and quality continue to be produced in the *Fabrica das Armas*, near Toledo; but the quantities are comparatively inconsiderable. The manufactures of saltpetre and gunpowder, brass cannon, tobacco, porcelain, tapestry, and mirrors are conducted exclusively by government; the supply is very limited, the prices of the articles produced extravagantly high, and, excepting tobacco, they are all productive of loss. In some parts, mats and shoes are extensively made of the esparto rush, used, in recent years, in the manufacture of paper in England.

Commerce.—The subjoined table shows the total value of the imports and exports (including bullion and specie) of Spain and the Balearic Isles, by sea, in national and foreign vessels, and by land, in the year 1862:—

| | Imports | Exports |
|-----------------------|--|-----------------------------|
| | 1862 | 1862 |
| By Sea:— | Reales | Reales |
| In National Vessels . | 1,122,782,616 | 478,140,652 |
| In Foreign Vessels . | 405,540,227 | 530,351,142 |
| By Land | 150,989,860 | 107,040,476 |
| Total | { Reales 1,679,312,703 £ 16,798,127 | 1,110,532,270 11,105,322 |

The great articles of export from Spain consist of raw products. Of these, wine, olive oil, wool, fruits of various kinds, lead, quicksilver, brandy, cork-wood, salt, raw silk, and wheat are the most important, and are almost all susceptible of an indefinite increase.

The great articles of import are colonial products, obtained principally from Cuba; cottons and cotton wool, linens, and hemp and flax, woollens, salted fish, hardware, glass and earthenware, timber, rice, hides, butter and cheese. Subjoined is a table showing, after official returns, the value of the principal articles (including bullion and specie) exported from Spain and the Balearic Islands, in each of the years 1861 and 1862.

| Principal Articles | 1861 | 1862 |
|-----------------------------|-------------|-------------|
| | Reales | Reales |
| Wine | 334,975,490 | 313,114,950 |
| Spirits and Liqueurs . | 21,950,400 | 20,133,240 |
| Silver Coin | 95,030,541 | 48,207,496 |
| Metals | 132,536,276 | 141,414,825 |
| Coals, Vegetable . . . | 9,545,430 | 6,424,425 |
| Ores, of all kinds . . . | 25,682,901 | 33,426,570 |
| Salt, common | 16,706,744 | 20,636,254 |
| Grain, Vegetables and Seeds | 61,297,818 | 30,363,377 |
| Flour | 145,242,460 | 86,511,352 |
| Fish, of all kinds . . . | 2,365,208 | 3,365,799 |
| Preserves | 4,140,645 | 2,493,760 |

TABLE OF EXPORTS—continued.

| Principal Articles | 1861 | 1862 |
|--|-----------------------------|-----------------------------|
| | Reales | Reales |
| Fruit:— | | |
| Olives | 1,701,420 | 2,137,900 |
| Raisins | | |
| Nuts, small | | |
| Oranges and Lemons | | |
| Almond | 108,335,726 | 143,003,454 |
| Dry, not otherwise named | | |
| Fresh | | |
| Plants and Herbs | 6,089,468 | 12,974,085 |
| Cork, sheets & ready-made | 38,496,644 | 33,450,774 |
| Soap, hard | 21,000,150 | 20,623,520 |
| Oil:—Olive | 54,126,120 | 38,670,480 |
| Almond | 2,928,069 | 865,487 |
| Wool:— | | |
| Washed, unwashed, and waste | 30,098,749 | 30,961,078 |
| Manufactures of | 2,097,785 | 1,750,351 |
| Silk:— | | |
| Raw and Waste | 4,527,778 | 4,401,170 |
| Manufactures of | 4,100,039 | 2,112,516 |
| Esparto Grass, stemmed and unstemmed | 5,879,470 | 9,713,970 |
| Hemp:— | | |
| Dressed | 1,129,200 | 761,200 |
| Manufactures of, and of Cotton | 3,583,184 | 6,062,747 |
| Shoes, of all kinds | 8,157,776 | 11,653,336 |
| Animals, living | 19,679,102 | 17,643,730 |
| Liquorice, Juice and Paste | 3,304,380 | 4,164,446 |
| Meat, salted | 3,717,476 | 3,016,556 |
| Hides, of all kinds | 5,931,328 | 5,514,875 |
| Paper, of all kinds | 6,348,009 | 6,123,630 |
| Books, printed | 1,852,800 | 1,369,500 |
| Saffron | 8,995,000 | 18,060,000 |
| Sugar | 5,024,745 | 2,323,552 |
| Total of principal (Reales) and other Articles (£) | 1,269,500,460 12,695,005 | 1,110,582,270 11,105,322 |

The importance of the trade that Spain formerly carried on with her vast possessions in the New World was, at all times, much exaggerated; and she, in truth, was little better than an agent in the business, the greater part of the goods sent in Spanish bottoms to the colonies being, in reality, the property of foreign merchants. The strength of the commercial navy of the kingdom, or the number and tonnage of sailing and steam merchant vessels which belonged to Spain in the year 1860 was as follows:—

| Description | Vessels | Tons |
|-----------------------------------|---------|---------|
| Sailing vessels | 6,715 | 449,436 |
| Steam vessels (horse-power 7,322) | 68 | 13,369 |

Spain was famous in ancient times for her precious metals, and has still 2,332 silver mines; but some of them are very insignificant. There were also, on January 1, 1860, 37 mines of antimony, 744 of lead, 31 of zinc, 26 of cinnabar, 156 of calamine, 270 of copper, 72 of iron pyrites, and 527 of coal—the latter not very productive when compared with the English coal mines. The quantities produced are stated in a report for the year 1780, and another for the year 1860. These returns show that the produce of iron has risen during that period from 9,000,000 kilogrammes to 41,137,800; that of copper from 15,000 to 2,704,700; that of zinc from 125,000 to 1,853,000. The produce of quicksilver has remained nearly the same, namely, 900,000 and 903,726 kilogrammes per annum, while lead has risen from 1,600,000 to 82,498,400 kilogrammes. There were 1,420,124 marks of silver produced in 1860. The progress in coal mining has been very considerable. In 1858 the native produce was 1,985,150 quintals

of charcoal, gives a total consumption of 8,315,703 quintals, or 382,522,338 kilogrammes. In 1860, the Spanish mines produced 3,217,734 quintals of 100 kilogrammes, and coal was imported to the value of 33,000,000 reales, or 330,000*l*. In 1846, the importation was nearly 73,000,000 kilogr.; and from that year to 1858 the imports rose 217,000,000 kilogr.; that is, they quadrupled in twelve years.

The trade of a banker, as it is understood in Great Britain, is almost unknown in Spain; but several banks have been established in Madrid, and there is an extensive circulation of inland bills of exchange. All merchants in good credit call themselves bankers, do banking business, and have agents and connections in the different towns, to facilitate their operations; but there is, notwithstanding, considerable difficulty in remitting money from place to place, and a different rate of exchange frequently exists between towns only a few leagues distant. In ordinary transactions there are no substitutes for cash, and a good deal of trouble and inconvenience is experienced in counting, examining, and weighing the coins.

Accounts are kept in *reales de vellon*, of which about 90 are equivalent to 1*l*. The pistole is worth 16*s*. 9*d*. British currency. The money in circulation consists of gold and silver coins of very various value, and of copper. Dollars are rarely seen, especially in the N. and near the sea-coast, in consequence of the premium they bear in France, to which they are smuggled in large quantities, notwithstanding the penalties consequent on their exportation. Oil is sold by the *arroba mina*, 100 of which are equal to 335 English wine-gallons: 4 arrobas are equal to a quintal, or 102 English pounds. The *cahiz*, or measure for corn, is divided into 12 *fanegas*, five of the latter being equal to a quarter. One hundred Spanish *varas*, or yards, are equal to 92.5 English yards, and a Spanish *legua* contains 5,000 varas. The traveller tries in vain to find a rule whereby he may compare the Spanish land measures with the English acre; and, with respect both to weights and measures generally, they vary greatly in different provinces.

Roads, Railways, and Canals.—Spain, until very recently, was singularly destitute of roads and other means for the speedy and easy transport of travellers and products from place to place. The king's highways (*caminos reales*), the only roads worthy of the name, extended only between the more important places: some of them, as, for instance, those between the capital and Pampeluna, Saragossa, Badajoz, Seville, and Granada, were, generally speaking, kept in good repair; but the great road from Pampeluna by Vittoria, Burgos, and Valladolid, to Madrid, was stated to be inferior to the second-rate roads of England. The great road to Valencia was in a wretched state; and so likewise was that running by Tarancon and Albacete into Murcia. In Catalonia the roads are comparatively numerous and good. The roads of Biscay and Navarre, also (owing to their being placed under a provincial government), are more numerous, better constructed, and more carefully managed than in the rest of the country. On the whole, the ordinary roads of Spain were always, and, to a great extent, still are, in a wretched condition, the consequences of which, for trade and industry, have been only remedied, within the last few years, by the construction of a vast and tolerably well planned network of railway. The railway system centres at Madrid, from which four great lines radiate in as many directions, con-

the total length of the lines, and their revenue in the year 1863 :—

| LINES | Length opened for Traffic, Dec. 31, 1863 | Total Revenue in 1863 | | Average Receipts per Kilometre in 1863 |
|--|--|-----------------------|-------------|--|
| | | Kilom. | Reales | |
| Madrid to Olazagutia and Irun, and Venta de Baños to Alar el Rez | 683 | | 51,118,745 | 84,774 |
| Alar el Rez to Santander | 107 | | 11,513,307 | 107,601 |
| Palencia to Leon | 123 | | 322,333 | — |
| Sama de Langreo to Gijon | 39 | | 2,595,034 | 66,539 |
| Tudela to Bilbao | 250 | | 9,047,153 | 64,164 |
| Madrid to Zaragossa | 394 | | 17,369,360 | 63,138 |
| Zaragossa to Pampluna | 165 | | 9,404,508 | 52,545 |
| Zaragossa to Barcelona | 366 | | 26,764,348 | 73,127 |
| Montblanch to Tarazona | 44 | | 1,332,914 | 41,653 |
| Martorell to Barcelona | 29 | | 2,085,081 | 71,899 |
| Barcelona to Gerona via Mataro and Granollers | 179 | | 11,741,778 | 65,596 |
| Barcelona to Sarria | ■ | | 676,551 | 253,700 |
| Madrid to Toledo and Alicante | 482 | | 64,095,534 | 132,998 |
| Alcazar to Ciudad Real, and Manzanares to Santa Cruz de Mudela | 165 | | 6,372,272 | 38,620 |
| Cordova to Seville | 131 | | 7,703,243 | 58,803 |
| Seville to Cadiz | 168 | | 17,481,873 | 103,312 |
| Alora to Malaga | 38 | | 390,604 | — |
| Murcia to Cartagena | 65 | | 1,763,742 | 30,943 |
| Almansa to Grao de Valencia | 187 | | 10,740,043 | 78,321 |
| Valencia to Castellon | 79 | | 2,453,911 | 36,625 |
| Total | Kilometres | 3,587 | 254,911,334 | 71,126 |
| | Eng. Miles | 2,227½ | £ 2,549,113 | Average per Eng. Mile, £1,144 |

The whole of the Spanish railways belong to private companies, but nearly all have obtained guarantees, or subventions, from the government. The principal lines have been conceded to private individuals, or companies, with large subventions. These concessions, when a 'subvention' is attached to them, are given by public adjudications. Any one who has made the stipulated deposit of 'caution money,' may apply for a concession in sealed tenders, which are opened and read in public on the day of adjudication, and whoever offers to make the railway with the lowest subvention, becomes legally entitled to the concession. The subventions are paid by instalments during the construction of the work, in bonds or obligations, bearing 6 per cent. interest, at their market value of the day.

Spain has but few canals. The canal of the Ebro, from Tudela to Santiago, 41 m. below Saragossa, was chiefly executed in the reigns of Charles III. and IV., under the administration of Count Florida Blanca; and though of insufficient depth for navigation on any large scale, it is made available during nearly its whole extent for barges of small draught, besides being extremely useful for the irrigation of the surrounding country. More important is the canal of Castile, opening a communication between the vast and fertile plains of Old Castile and Leon and the N. Sea, and affording an outlet for their surplus produce. It has been constructed from Segovia on the S., past Valladolid and Palencia to Aguilar del Campo:

another to Burgos. The navigation of the Tagus has engaged the attention of different Spanish sovereigns; and, at the close of the sixteenth century, the river is said to have been made navigable for barges from Toledo to its mouth; but if so, it was subsequently rendered useless through neglect, and it is only within the last few years that a company undertook to make it navigable from Aranjuez (23 m. above Toledo) down to Lisbon. The Guadalquivir was once navigable for flat-bottomed boats up to Cordova, but Seville is the highest point reached at present. Many projects have been set on foot for improving the river by deepening the channel; but the great and sudden floods to which it is subject must operate as a bar to its successful navigation; nor, even if the part above Seville were considerably improved, is it at all probable that the bars and sand-banks of the marshy district known as the *Marisma* could be so far removed as to make the river accessible by sea-borne vessels even as far as Seville.

Population.—The exaggerated and unfounded statements with respect to the former flourishing state of agriculture, manufactures, and commerce of Spain have already been noticed. Inasmuch, however, as the population of a country is mostly dependent on its agriculture and manufactures, it follows that the same facts and reasonings which show that their extent and prosperity in the fourteenth and fifteenth centuries had been greatly exaggerated, go far, also, to show that this must have been the case with regard to the accounts of the comparatively dense population of Spain at the era alluded to. Down to the fifteenth century, or to the junction of the crowns of Castile and Aragon by the marriage of Ferdinand and Isabella, Spain was divided into a number of states, between which the most violent animosities subsisted, and most parts of the peninsula were a prey to violence and every species of disorder. It would be contradictory and absurd to suppose that a country placed under such circumstances could be densely peopled. No doubt, however, the population of Spain declined considerably during the disastrous reigns of Philip III., Philip IV., and Charles II. This decline has been ascribed, in great part at least, to the expulsion of the Moors in the reign of Philip III. But though it is impossible too strongly to condemn this measure, and that of the expulsion of the Jews during the reign of Ferdinand and Isabella, and the detestable fanaticism in which these acts originated, it must be admitted, notwithstanding, that their influence has been a good deal overrated. The numbers expelled were magnified far beyond the truth; and it is obvious that the vacuum, such as it was, created by their expulsion would, in ordinary circumstances, have afforded a new field for the employment of those who continued in the country, and acted, in fact, as a stimulus to population. The truth seems to be, that the decline of pop. between the demise of Philip II. and the termination of the war of the succession, was a consequence of continued and systematic misgovernment, rather than of any particular acts of oppression. There are several authorities for fixing the number of inhabitants after the conquest of Grenada, about A.D. 1500, at 9,320,691. The figures, apparently the result of a census, are for each province as follows :—

| | | | |
|-----------|-----------|-----------|-----------|
| Castile | 7,500,000 | Alava | 60,696 |
| Grenada | 400,000 | Guipuscoa | 69,665 |
| Aragon | 266,190 | Navarre | 154,165 |
| Valencia | 486,860 | | |
| Catalonia | 326,970 | Total | 9,320,691 |
| Biscaya | 56,145 | | |

This number had sunk, in 1715, to 7,625,000. Ac

amounted to 8,206,791. According to the official 'Censo de Poblacion en el Siglo XVI,' compiled from the archives of Simancas and published in 1829, it amounted in the year 1482 to 7,900,000, in the year 1541 to 6,990,262, in the year 1587 to 6,631,929, and in the year 1594 to 7,304,057. There was a gradual decrease from 1500 to 1700, probably the result both of the discovery of America and despotic rule. But the national decline came to an end about 1750; for, in the census of 1768, the population had risen to 9,159,999; in 1797 to 10,541,221; and in 1857 to 15,807,753.

Religion.—Spain has long been, and still is, the favourite seat of the Rom. Cath. religion, the country in which it has been maintained in the greatest purity, and to the exclusion of every other. The Inquisition was introduced, or, at all events, was vested with a vast increase of power, in the reign of Ferdinand and Isabella; and that formidable tribunal ultimately succeeded, by dint of the stake and the rack, and such like atrocious means, in exterminating heresy, or, in other words, all difference of opinion as to religious matters in Spain; and it was, also, mainly instrumental in prevailing on its weak and bigoted sovereigns to banish the Moors. According to Llorente, no fewer than 13,000 individuals, accused of heresy, were publicly burned by the different tribunals of Castile and Aragon; and 191,413, accused of the same offence, suffered other punishments in the brief space between the establishment of the modern Inquisition in 1481 and 1518, only two years after the death of Ferdinand; and since then the number of its victims has been incomparably greater. (Prescott's Ferdinand and Isabella, iii. 465.) Probably this statement may be exaggerated; but it is, notwithstanding, abundantly certain, that all other persecutions of which we have any authentic accounts have been mild compared with those inflicted by this blood-thirsty tribunal. In point of fact, however, the mischievous influence of the Inquisition did not consist so much in its judicial murders, and other atrocities perpetrated in the sacred name of religion, as in its deadly influence over the mind and feelings of the nation. It was quite as hostile to all sorts of political and philosophical knowledge as to heresy in religion: it was, in fact, the deadly foe of every thing like free inquiry; and while the importation of most useful works from foreign countries was a capital offence, nothing could be printed at home unless it were approved by the inquisitors.

The numbers and wealth of the clergy and monastic orders were such as might be expected in a country where the Inquisition was triumphant, and where to commit a murder was a less offence than to insinuate a doubt as to the 'real presence.' According to an official statement drawn up in 1812, it appears that the clergy were then in possession of about one-fourth part of the landed property of the kingdom, exclusive of tithes and other casual sources of income, producing in all a total gross revenue of about *eleven* millions sterling a year. The revenues of some of the high ecclesiastics were immense: the archbishopric of Toledo is said to have been worth from 65,000*l.* to 80,000*l.* a year.

According to the official returns of the census of 1787, the ecclesiastics of all descriptions, including 61,617 monks, 32,500 nuns, and 2,705 inquisitors, amounted to 188,625 individuals. And it appears, from the official returns published in the 'Correo Literario' of Madrid, in 1833, that, notwithstanding the attacks made upon the ecclesiastical state during the French war and subse-

whom 61,727 were monks, and 24,007 nuns. Shortly after this period, however, a very great change for the better was effected. A decree, passed on the 23d of July, 1835, suppressed all conventual establishments with not more than 12 inmates; and the example thus set was followed up by the decree of the 9th of March, 1836, which entirely suppressed all conventual establishments and religio-military orders. The monks who were thus turned out of their dwellings were to receive small stipends; and it is to be regretted that, owing to the difficulties in which the country has since been involved, these stipends have been very irregularly paid. But the inconveniences thence arising affect only a few individuals, whose claims on the public sympathy were of the slenderest description; whereas the measure in which they originate cannot fail to be productive of great national advantage, and is, in fact, one of the most beneficial results of the late changes.

The whole of the vast property formerly belonging to the church has been confiscated for the use of the state, and a considerable portion of it has been already sold. According to the constitution, the nation undertakes to support the public worship and clergy of the established church; but, owing to the intestine commotions that have prevailed in the country, and its financial difficulties, this condition has not been effectively carried out; and not a few of the clergy are, at present, but little removed from a state of indigence.

It is certain that, during the last half century, and especially since the commencement of the late struggle with France, the bigotry of the Spaniards, especially of the inhabs. of towns, and the influence of the priests, have materially declined. And, by a necessary, though unfortunate, consequence, the abuses and vices of the clergy have reacted against religion itself; and, at this moment, most intelligent persons in Spain, though making an outward profession of religion, entertain a profound contempt for the mummeries enjoined by the clergy, and are mostly, indeed, decided sceptics. According, however, as the church is purified, and ceases to be identified with every thing most deserving of reprobation, religion will, no doubt, recover its proper influence, and will cease to be degraded in the public estimation by the intolerance, extortion, and immorality of its professors.

Government.—At the period of the union of the crowns of Castile and Aragon, by the marriage of Ferdinand and Isabella, each of the kingdoms had representative assemblies, or cortes, that shared in the legislative authority, and enjoyed very extensive privileges. Unluckily, however, though the crowns were united by the marriage now referred to, the kingdoms were not; each continued to preserve its own laws and institutions; and their mutual jealousies enabled the sovereigns to employ the one against the other, and ultimately to crush the liberties of both. This result was greatly facilitated by the extensive conquests of the Spanish sovereigns. In the reign of Ferdinand and Isabella, Granada, Navarre, and Naples were subjected to the Spanish crown; so that the princes became, in a great measure, independent of the constitutional control of the cortes of their hereditary states. Under Charles V., who possessed, in right of his father, all the dominions of the house of Austria, and under whom all but boundless territories were acquired in the New World, the preponderance of the external dominions of the crown was vastly increased; and the defeat of the forces of the rebellious Castilians, under Padilla, in his reign, and the execution of

pleted the extinction of all constitutional control on the acts of the sovereign; at the same time that the Inquisition having first controlled, and next eradicated, all energy and independence of mind, the nation gradually sunk into a state of torpor and stupid indifference.

This state of things continued, with slight interruptions, till the invasion of Spain by Napoleon; when the mortified pride of the nation made them take arms in defence of their independence, and of the rights of the worthless imbeciles who had abdicated the crown. It is useless to enter into any details as to the events that followed. The novel circumstances under which the nation was now placed made it necessary to convoke her ancient cortes, and in 1812 a constitution was formed on a representative basis. This constitution was, however, abolished by Ferdinand the moment he was set at liberty by the French, in 1814; and from this period down to 1820, the king exerted himself to effect the ruin of those to whom he was mainly indebted for the crown, and even went so far as to restore the Inquisition that had been suppressed by the French. But the army, and a large portion of the nation, disgusted at these measures, broke out in rebellion, and Ferdinand was compelled to accept the constitution of 1812. Owing, however, to the influence of the priests, and the ignorance of a large proportion of the population, the constitution was by no means acceptable to very many classes; and the French having entered Spain with a powerful army, under pretence of restoring order, the constitutionalists were everywhere defeated, and Ferdinand was once more restored to absolute power.

Ferdinand having expired in 1833, his infant daughter, Isabella II., was proclaimed queen, in virtue of a law entitling her to the crown in preference to her uncle, Don Carlos, the heir of the crown under the Salic law, which had previously obtained in Spain. This led to an obstinate civil war, which fortunately terminated in the total defeat of Don Carlos and his claims. In 1834, after the demise of Ferdinand, Christina, the queen-regent and mother of Isabella, proclaimed a charter for the Spanish nation, called the *Estatuto Real*; but it gave little or no satisfaction to the liberal or constitutional party, by whom the pretensions of her daughter were supported, and the queen was obliged to issue a decree, pledging herself to adopt the constitution of 1812, with such modifications as the cortes might agree to.

The present fundamental law of the kingdom is embodied in the constitution of May 23, 1845, partly suspended in 1857, but re-established in 1864. It vests the power of enacting laws, in conjunction with the king, in the representatives of the nation, called 'las cortes.' The cortes are composed of two cooperating bodies, the senate and the congress of deputies, or 'diputados a cortes.' According to the terms of the constitution, the number of senators shall be equal to three-fifths of the whole number of the deputies. The senators are appointed by the king, from a triple list proposed by the electors of each province who elect the deputies. To each province belongs the right of proposing a number of senators proportional to its population; but each is to return one senator at least. To be a senator it is necessary to be a Spaniard, to be forty years of age, and to be possessed of an income of 1,000 reales per annum. All Spaniards possessed of these qualifications may be proposed for the office of senator in any of the provinces of the monarchy. Each time that there is a general election of deputies, whether in consequence of their term of office

having expired, or of a dissolution of the congress, the third part of the senate, in the order of seniority, is to be renewed, those going out being re-eligible. The sons of the king and of the immediate heir to the throne are senators by right at the age of twenty-five years.

The second chamber, or congress of deputies consists of representatives of the people, in the proportion of one deputy to every 35,000 souls of the population. The deputies are elected directly by the voters, and may be re-elected indefinitely. To be a deputy it is necessary to be a native of the kingdom, not a clergyman, and to have completed the twenty-fifth year, and every Spaniard possessing these qualifications may be named a deputy for any of the provinces. The deputies are appointed for three years.

The cortes assemble each year. It is the right of the sovereign to convoke them, to suspend and close their meetings, and dissolve the cortes; but under the obligation, in the latter case, of convoking and reassembling another cortes within the period of three months. If the sovereign should omit to convoke the cortes on the 1st of December for any one year, the cortes are notwithstanding to assemble precisely on that day; and in case the conclusion of the term of the congress holding office should happen to occur in that year, a general election for the nomination of deputies is to commence on the first Sunday of the month of October. On the demise of the crown, or on the sovereign being incapacitated to govern through any cause, the extraordinary cortes are immediately to assemble. Each of the legislative bodies forms rules for its own internal regulation, and has to scrutinise the legality of the elections, and the qualifications of the individuals who are elected. One of the legislative bodies cannot be convoked for business without the other being assembled at the same time, except in the case in which the senate sits in judgment on the ministers.

The sovereign and each of the co-legislative bodies possess the right of originating laws. Laws relating to taxes and public credit are to be presented first to the congress of deputies; and if altered in the senate contrary to the form in which they have been approved by the congress, they are to receive the royal sanction in the form definitely decided on by the deputies. The resolutions of each of the legislative bodies are to be determined by an absolute majority of votes; but in the enactment of laws the presence of more than half the number of each of these bodies is necessary. If one of the co-legislative bodies should reject any project of law submitted to them, or if the king should refuse it his sanction, such project of law is not to be submitted anew in that legislature.

Besides the legislative powers which the cortes exercise in conjunction with the sovereign the following faculties belong to them—First, to receive from the sovereign, the immediate successor to the throne, from the regency or regent of the empire, the oath to observe the constitution and the laws. Second, to resolve any doubt that may arise of fact or of right with respect to the order of succession to the crown. Third, to elect the regent, or appoint the regency of the empire, and to name the tutor of the sovereign while a minor, when the constitution deems it necessary. Fourth, to render effective the responsibility of the ministers of the crown, and to designate those who are to be impeached to the judgment of the senators. The senators and deputies are irresponsible and inviolable for opinions expressed and votes given by them in the discharge of their duties. Sena-

tors and deputies are not to be proceeded against or arrested during the session without the permission of the legislative body to which they may belong, if not taken in the act of committing any crime; but in this case, or other in which they are prosecuted or arrested whilst the cortes are closed, they are to give immediate information to their respective co-legislative bodies for their cognisance. Deputies and senators who receive from the government, or from the royal family, any pension or employment which is more than a promotion from a lower to a higher office of the same kind, or a commission with salary, honours or titles, are subject to re-election. The senate, in the session of 1863, numbered 296 mem., and congress 394 dep.

The executive authority is exercised, under the sovereign, by a council of responsible ministers, called 'secretarias del despacho de estado.' All commands or orders issued by the sovereign must be signed by the respective ministers; and no public functionary is to execute such orders if not thus signed. The ministers may be senators or deputies, and take part in the discussions of the two legislative bodies, but they are permitted to vote in that body only to which they belong.

The sovereign is permitted to consult, in important cases, a council of state, consisting of the ministers and thirty-two privy councillors. The council of state was first organised by royal decree of July 14, 1858, which was modified by a law of the cortes sanctioned September 1, 1860. According to this law, all privy councillors must be Spaniards by birth, and not less than twenty-five years of age. The council is divided into six sections, namely, first, foreign affairs and justice; second, war and marine; third, finances; fourth, interior and public welfare, or 'somento'; fifth, colonies; and sixth, department for deciding affairs in dispute between the various ministers. The privy councillors, whose numbers must not exceed thirty-two, are nominated by the sovereign.

The laws of Spain, previously to the late revolution, and the great number of those now in force, are embodied in the codes known by the titles of *Fuero juzgo*, *Leyes de las Siete Partidas*, *Ordenamiento Real*, *Fuero Real*, and *Novissima Recopilacion*. The first of these is, in the main, an abridgment of the Theodosian code, originally published by Alaric, son of Euric, one of the Gothic conquerors of the peninsula, and successively augmented by the addition of new laws. The *Ordenamiento Real* contains the code of laws established by Ferdinand and Isabella. The *Leyes de las Siete Partidas* is a compound of Gothic, Roman, and canon law. The *Fuero Real* (a mixture of Roman and Gothic law) was compiled at Huesca in 1248, for the use of the kingdom of Aragon; and the *Novissima Recopilacion* is a digested collection of edicts issued by the kings of Spain, and enjoys the highest authority. It cannot be surprising that, with so many different and often conflicting codes, the general system of jurisprudence should be extremely defective. But the administration of the laws is incomparably worse than the laws themselves, being slow, complicated, and protracted to a ruinous degree. There are endless appeals from one jurisdiction to another, and the whole machinery of the courts is adapted to screen the venality of the judges, and to afford a rich harvest to the *escribanos*, or attorneys, the only medium of communication between the client and the judge.

The wretched defects in the administration of justice were, in some degree, obviated, in so far, at least, as petty cases were concerned, by the adop-

different privileges of the different towns, boroughs, and villages in which they reside, decide the cases brought before them, like Sancho Panza in the island of Barataria, according to their own sense of what is right and equitable. But, with the exception of this defective tribunal, every other part of the Spanish judicial system is a tissue of abuses.

Language, Literature, and Education.—It seems probable that the Cantabrian was the most ancient language of Spain, of which remnants are supposed by some still to exist in the modern Basque, spoken by the Biscayans and other inhabs. of the districts bordering on the Pyrenees. The old language of the peninsula must, no doubt, have been considerably alloyed by the admixture of Phœnician words and phrases during the Carthaginian dominion; and when the Romans conquered Spain, they introduced their language, which, for several centuries, was the principal medium of communication of all except those living in the most remote districts. The Visigoths, who followed the Romans in possession of the peninsula, introduced the *lingua Romana*, a mixture of the Latin and German languages; but the Latin, though corrupt, still continued to be spoken in many parts. Again, when the Moors overran the country, expelled the Visigoths, and established their own power, they brought with them the Arabic language, already highly cultivated, and well adapted for poetry; and this, in turn, became the general language of the country. Thus, out of numerous elements was gradually formed a new language—the Spanish; and though numerous dialects necessarily arose in the different petty kingdoms into which the country was split, that of Castile became at length the classical language of Spain. Its basis is Latin; and many of the ancient inflexions, as well as words, are still preserved. There are also a large number of Teutonic words; but the admixture of Arabic, though very considerable, is less than in the Portuguese. Force of expression, depth of sound, and mellifluous cadence, are the peculiar characteristics of the Spanish; which, however, has a guttural accent, derived probably from its Teutonic origin. The abundance of vowels and liquids makes the language harmonious when spoken by native Castilians; it is essentially poetical, and poetry may be considered as the germ of the national literature. It is a curious fact, that there is very little *patois* among the Castilians, and that the language is spoken by the lower classes with remarkable purity and precision.

The rise of Spanish literature cannot be traced further back than the middle of the 12th century, for the songs of the Troubadours belong to a period antecedent to the settlement of the language. The ballads composed in honour of Rodrigo Diaz de Vivar, called *el Campeador*, or more popularly the *Cid*, are amongst the earliest specimens of Spanish writing, and display at once great independence of thought, and felicity of expression. No doubt, however, the Moorish ballads, or those written to celebrate the chivalrous contests between Christian and Moslem knights, that preceded and accompanied the fall of Granada, form the most striking and distinctive part of the national literature of Spain. The Moorish wars had always afforded abundant themes of interest for the Castilian muse; but it was not till the fall of the capital that the very fountains of song were broken up, and those beautiful ballads were produced, which seem like the rays of departed glory lingering round the ruins of Granada. They present a most remarkable combination of, not

effeminate luxury of the East. They are brief, seizing single situations of the highest poetic interest, and striking the eye of the reader with a brilliancy of execution, so artless in appearance withal as to seem rather the effect of accident than study. We are transported to the gay seat of Moorish power, and witness the animating bustle, its pomp, and its revelry, prolonged to the last hour of its existence.' (Prescott's *Ferdinand and Isabella*, ii. 200.) But it was, perhaps, hardly necessary to say so much about the Spanish ballads, as the admirable translations of Mr. Lockhart have made their spirit, at least, familiar to most readers.

The honour of being the first to introduce regular dramatic writing into Spain has been ascribed to Torres de Naharro, in the early part of the 16th century. He was followed by Lopez de Vega, born at Madrid in 1562, at once the most original, most unequal, and most voluminous of the peninsular dramatists. Calderon, born in 1600, carried the Spanish drama to its highest perfection. Like his great precursor, Lopez de Vega, his plays are most unequal, the finest scenes being mixed up with the most revolting barbarism and extravagance. The astonishing fecundity of these writers may in some degree account for, though it cannot excuse, the defects and inconsistencies in their dramas. The published works (which do not, however, embrace nearly all his pieces) of Lopez de Vega consist of 25 vols. 4to, each containing 10 or 12 plays; and 127 dramas are ascribed to Calderon, besides a still greater number of vaudevilles and interludes. The Spanish drama, however, has long fallen into decay. The humiliation of the country during the disastrous reigns of Philip IV. and Charles II., and the deadening influence of the Inquisition, were little favourable to its culture; and after the accession of the Bourbon dynasty to the throne, French criticism and taste obtained an ascendancy, while the troubles in which Spain has been more recently involved have stifled all poetical talent. Some endeavours, indeed, have been made to revive the national drama; but they have signally failed, and no modern name connected with this branch of literature deserves notice, except, perhaps, that of Martinez de la Rosa, the author of the '*Viuda de Padilla*.' The '*Araucana*' of Ercilla, born in 1525, is the only poem that Spain has produced that has any pretensions to be classed among epics.

Chivalrous romance was early and assiduously cultivated in Spain. Happily, however, the inimitable satire of Cervantes destroyed at once and for ever the whole race of knights errant. His '*Don Quixote*,' however, still continues to interest all classes of readers by its exhaustless wit, the truth of its delineations, and its practical good sense. It has been rendered into almost all languages; and, how defective soever the translation, it never fails to amuse and instruct.

But, with the exception of this unique and admirable work, Spanish works are but little known in foreign countries; and in most departments, indeed, the literature of Spain is poor in the extreme. And how could it be otherwise? In 1502 the censorship of the press was established; and the power of carrying it into effect was very soon entrusted to the Inquisition. '*Il s'est établi dans Madrid*,' says Beaumarchais, with quite as much of truth as of wit, '*un système de liberté sur la vente des productions, qui s'étend même à celles de la presse; et que, pourvu que je ne parle en mes écrits ni de l'autorité, ni de culte, ni de la politique, ni de la morale, ni des gens en place, ni des corps en crédit, ni de l'Opéra, ni des autres spectacles, ni de personne qui tienne à quelque chose, je puis tout dire librement, sans l'expectation de deux ou*

trois censeurs.' (Marriage de Figaro, acte v.) Under such circumstances, it would be contradictory and absurd to expect that the Spanish writers should have distinguished themselves in philosophical research, original discussion, or in any pursuit requiring freedom of inquiry. Spain has a few respectable, but no eminent, authors.

Since 1830, however, a great change for the better has taken place; the censorship of the press has been suppressed; newspapers have been established; and the influence and authority of the clergy greatly diminished. Hopes may, therefore, be reasonably entertained that literature will again revive; but no sudden development of the mental resources of the nation need be expected, and many years must elapse before literature acquires any material influence.

Up to a very recent period the great mass of the population of Spain was in a state of extreme ignorance. It was rare, in the latter part of the 18th century, and at the beginning of the present, to find a peasant, or an ordinary workman, who was able to read, which accomplishment, among women, was even held to be immoral. Until 1808, public education was in the hands of the clergy; but late enactments, giving the instruction of the people in charge of the government, have made a radical change in this respect. The state, however, pays but a very small sum towards public education, which is left mainly to the charge of the communes and the parents themselves; but the superintendence of the government over educational matters has led to vast progress. In 1797 only 393,126 children attended the primary schools, which were very imperfect. In 1812 the cortes tried to introduce some modifications, but failed, on account of the war, in making a radical reform in popular education. Fresh efforts were made in 1820 and 1825, but still without much success. The law of July 21, 1838, enjoining the expenditure of considerable sums by the communes for the purpose of public instruction, proved a great step in advance. Since that time the laws have been several times amended, especially in 1847 and 1857, when the masters were subjected to examination, school-rooms built, and different scholastic institutions founded. The result was, that in 1848 there were 663,711 pupils, and on January 1, 1861, 1,046,558 pupils, of both sexes, divided between the public and private schools as follows:—

| Description of Schools | Schools | Scholars | | |
|-------------------------------------|---------|----------|---------|-----------|
| | | Boys | Girls | Total |
| Public Schools— | | | | |
| Superior | 219 | 14,559 | 524 | 15,083 |
| Elementary | 10,261 | 398,176 | 216,953 | 615,129 |
| Mixed | 7,399 | 222,000 | 42,904 | 264,904 |
| Total | 17,879 | 634,735 | 260,381 | 895,116 |
| Infants | 109 | — | — | 10,159 |
| Adults | 272 | — | — | 6,900 |
| Total | 18,260 | | | 912,175 |
| Private Schools— | | | | |
| Superior | 35 | 1,392 | 25 | 1,417 |
| Elementary | 1,902 | 50,317 | 39,284 | 89,601 |
| Mixed | 1,707 | 23,116 | 15,632 | 38,748 |
| Total | 3,644 | 74,825 | 54,941 | 129,766 |
| Infant | 90 | — | — | 3,244 |
| Adult | 66 | — | — | 1,393 |
| Total | 3,800 | | | 134,383 |
| Total of Public and Private Schools | 22,060 | — | — | 1,046,558 |

Middle-class education is given in fifty-eight public colleges by 757 professors to 13,881 pupils. In first-class education, the most remarkable feature is the large number of law-students, namely, 3,755 in 1859-60, divided among ten faculties. There are 10 faculties of literature and philosophy, with 224 students; 7 faculties of sciences, with 141 students; 4 faculties of pharmacy, with 544; 7 faculties of medicine, with 1,178; and 6 faculties of theology, with 339 students—in all, 6,181 students.

Revenue and Expenditure.—The budgets of the kingdom for the six years, 1857-63, were as follows—for each financial period, from July 1 to June 30:—

REVENUE.

| Years | Reales | £ |
|---------|---------------|------------|
| 1857-58 | 1,812,631,400 | 18,126,314 |
| 1858-59 | 1,775,155,393 | 17,751,554 |
| 1859-60 | 1,794,731,800 | 17,947,318 |
| 1860-61 | 1,892,344,000 | 18,923,440 |
| 1861-62 | 2,043,368,600 | 20,433,686 |
| 1862-63 | 2,031,569,000 | 20,315,690 |

EXPENDITURE.

| Years | Reales | £ |
|---------|---------------|------------|
| 1857-58 | 1,803,300,492 | 18,033,001 |
| 1858-59 | 1,775,155,393 | 17,751,554 |
| 1859-60 | 1,786,662,787 | 17,866,628 |
| 1860-61 | 1,887,369,825 | 18,773,698 |
| 1861-62 | 2,036,618,200 | 20,366,182 |
| 1862-63 | 2,021,135,280 | 20,211,353 |

The details of the budget from July 1, 1862, to June 30, 1863, were as follows:—

REVENUE FOR 1862-63.

| Branches | | Amount |
|--|--|---------------|
| Direct Taxes: | | Reales |
| Land | | 400,000,000 |
| Industries and Commerce | | 70,000,000 |
| Mortgages | | 31,000,000 |
| Mines | | 8,000,000 |
| Miscellaneous | | 141,197,200 |
| Total | | 650,197,200 |
| | | £6,501,972 |
| Indirect Taxes: | | |
| Custom Duties | | 220,250,000 |
| Excise | | 161,002,000 |
| Tolls on Roads, Bridges, and Ferries | | 15,600,000 |
| Stamps, &c. | | 45,000,000 |
| Postage Stamps and Stamps on Periodicals | | 21,000,000 |
| Tobacco | | 294,100,000 |
| Salt | | 119,000,000 |
| Gunpowder | | 20,500,000 |
| Lottery | | 125,000,000 |
| Mint | | 8,486,000 |
| Post | | 5,186,800 |
| Telegraphs | | 4,200,000 |
| Miscellaneous | | 126,899,000 |
| Total | | 1,166,223,800 |
| | | £11,662,238 |
| State Property: | | |
| Mines | | 29,778,000 |
| Church Property | | 48,146,000 |
| Miscellaneous | | 12,024,000 |
| Total | | 89,948,000 |
| | | £899,480 |
| Colonies: | | |
| Havana | | 78,000,000 |
| Porto Rico | | 2,000,000 |
| Philippines | | 45,200,000 |
| Total | | 125,200,000 |
| | | £1,252,000 |
| Grand Total | | 2,031,569,000 |
| | | £20,315,690 |

EXPENDITURE FOR 1862-63.

| ‘Obligaciones Generales:’ | | Reales |
|--|--|---------------|
| Royal Household | | 52,350,000 |
| Public Debt | | 338,081,596 |
| Courts of Justice | | 13,110,736 |
| Pensions | | 145,821,130 |
| Miscellaneous | | 52,266,015 |
| Total | | 551,629,477 |
| | | £5,516,296 |
| Ministerial Expenditure: | | |
| Presidency of the Cabinet | | 3,670,000 |
| Ministry of State | | 14,332,940 |
| “ of Religion and Justice | | 202,410,245 |
| “ of War | | 331,017,497 |
| “ of Marine | | 94,612,213 |
| “ of Interior | | 87,928,367 |
| “ of Commerce, Agriculture, and Public Works | | 80,174,420 |
| “ of Finance | | 420,887,628 |
| Miscellaneous and Extraordinary | | 234,472,493 |
| Grants | | |
| Grand Total | | 2,021,135,280 |
| | | £20,211,353 |

The deficit of 410,224,610 reales, or 4,102,246*l.*, thus created is to be covered by the sale of state property. The national and church property of Spain was and is still of immense value, but there was a reluctance in some people to buy the latter on account of religious scruples, till 1858, when a concordat was concluded with the pope, and sanction obtained for the sales, which were then actively continued, the government giving great facilities to the purchasers. The payments are made one-tenth in cash, and the remainder in promissory notes from 1 to 10, and, in some cases, to 19 years, the property remaining mortgaged to the final instalment, owing to which the biddings at times have been for even more than double the amount of its value. The cortes in 1859, 1861, and 1863, authorised the government to apply 28,000,000*l.* for the extraordinary expenses just enumerated, of which only about 16,000,000*l.* has been spent, the money being obtained out of the sums placed at interest by capitalists, corporations, and the public in the ‘Caja de Depositos,’ or deposit bank, under the direction of the government, for the repayment of which the treasury was accumulating the promissory notes given by the purchasers of the national properties. The quantity of these properties sold from 1855 to December 31, 1863, produced 80,156,700*l.* The properties unsold are valued at 13,525,000*l.*

In 1851, on account of the inability of the government to meet its engagements in full, certain large debts of Spain were converted into passive stock, that is, a stock not bearing interest, and which had to be liquidated by an annual sinking fund. The amortizable first and second class was created by a law of August 1, 1851, to be composed of the internal debt, called ‘Deuda sin Interes,’ and of some other various debts and claims against the government, which were called for liquidation before the ‘Direccion de la Deuda Publica.’ By that law a sinking fund of 120,000*l.* annually included in the budget was established, besides other advantages, for its extinction; and a commission, composed of three senators and three deputies, was ordered to be appointed yearly by the cortes to watch and report upon all the operations connected with the public debt.

The national liabilities of Spain, both funded and unfunded, amounted in July, 1863, to 15,550,000,000 reales, or 155,500,000*l.*, of which sum, 14,700,000,000*l.*, or 147,000,000*l.*, form the consolidated, and 850,000,000, or 8,500,000*l.*, the floating debt. The sale of church property, in return for which the former owners receive obligations on the national exchequer, has chiefly con-

tributed of late years to swell the national liabilities. A return ordered by the cortes, on November 1, 1858, gives the following account of the funded debt of Spain at that period:—

| DESCRIPTION OF DEBT | Amount of Debt | Amount of Interest |
|---|--|--|
| STATE DEBT | Reales | Reales |
| Perpetual Rentes at 3% } Consolidated, Home | 3,730,617,734 | 111,918,532 |
| Do. do. Foreign . . . | 1,052,804,000 | 31,584,120 |
| Deferred, Home . . . | 2,271,308,312 | 36,908,760 |
| „ Foreign . . . | 2,601,768,000 | 42,278,730 |
| Consolidated Rentes, at 5% due to the United States . . . | 12,000,000 | 600,000 |
| PUBLIC WORKS DEBT | | |
| Shares at 6% borrowed for Public Roads since 1833 . . . | 701,762,000 | 12,105,720 |
| Shares at 6% Railways Public Works . . . | 232,154,000 72,536,000 | 13,929,240 4,352,160 |
| DEBT OF PUBLIC TREASURY | | |
| Bonds for Capital and Interest 3% . . . | 30,457,069 | 913,712 |
| Total . . . | 10,705,407,116 £107,054,071 | 254,590,974 2,545,909 |

The bulk of the taxes were formerly divided into two great classes, and the division is not yet wholly abandoned,—the *rentas generales* and the *rentas provinciales*. The former were collected throughout all Spain, with the exception of Biscay. They included the revenue derived from the post-office, the stamp duties and customs, together with the royal monopolies of salt, tobacco, and gunpowder. The *rentas provinciales* were collected only in the provinces belonging to the crown of Castile, and did not, therefore, affect Biscay, Navarre, Catalonia, Aragon, or Valencia, which had peculiar and less burdensome taxes.

Army and Navy.—Spain during the reign of Philip II. had 280,000 men under arms. After the war of succession, her army was reduced to 75,000 men. Under Charles III. the Spanish army was increased to 90,000 men and 10,000 horses. At the death of Ferdinand the military force consisted of only 60,000 men and 8,000 horses. In 1859, when about to commence the war against Morocco, it was increased to 250,000 men. The army is formed by conscription; but the purchase of substitutes is not only allowed, but encouraged by the regular army. The time of service in the infantry is eight years, of which five have to be spent in the infantry of the line, and three in the provincial militia. For military purposes the kingdom is divided into five districts, or ‘capitanias generales,’ at the head of each of which stands a ‘captain-general,’ with the rank of field-marshal. Official returns of the year 1863 state the nominal strength of the army, including the ‘provinciales,’ or provincial militia, and the ‘guardia civil,’ or national guard, as follows:—

| | Staff | Officers | Rank and File | Total |
|--------------------|------------|--------------|----------------|----------------|
| Infantry . . . | 278 | 2,647 | 57,258 | 60,183 |
| Artillery . . . | 44 | 369 | 9,486 | 9,899 |
| Engineers . . . | 8 | 72 | 2,288 | 2,368 |
| Cavalry . . . | 107 | 829 | 10,904 | 11,840 |
| ‘Provinciales’ . . | 173 | 1,510 | 43,243 | 44,926 |
| ‘Carabineros’ . . | 43 | 470 | 11,549 | 12,062 |
| ‘Guardia Civil’ . | 24 | 401 | 9,965 | 10,390 |
| Total . . . | 677 | 6,298 | 144,693 | 151,668 |

The navy consisted, according to official returns, of the following vessels, at the commencement of 1863:—

| Sailing Vessels | Guns |
|---|-----------------|
| 2 Ships of the Line, each of 84 guns . . . | 168 |
| 5 Frigates, of from 32 to 50 guns . . . | 182 |
| 4 Corvettes, of from 16 to 30 guns . . . | 90 |
| 9 Brigantines, of from 12 to 16 guns . . | 140 |
| 15 smaller Vessels, of from 1 to 7 guns . | 61 |
| 35 Sailing Vessels, with | 641 guns |
| Steamers | Horse-power |
| 1 Screw Steamer of the Line, with 100 guns, and . . . | 1,000 |
| 8 Frigates, with 320 . . . | 3,200 |
| 11 Corvettes, with 42 . . . | 1,250 |
| 58 Gunboats, Transports, &c., with 94 . . . | 1,360 |
| Men-of-war Steamers, with 556 . . . | 6,810 |

A large number of vessels included in this list are not in a very good state, and probably not seaworthy.

Races and Character.—There are four distinct races in Spain: 1st, the Spaniards, who form the bulk of the population; 2dly, the *Basques* (about 500,000), descended from the ancient Cantabrians, and living in Navarre and the Basque provinces; 3dly, the *Morescoes*, descendants of the Moors, about 60,000 of whom still reside in Granada and the Alpujarras; and, lastly, the *Gitanos*, or gipsies, a race (comprising about 50,000) spread all over the peninsula, but especially on the SE. coasts; not strolling from place to place, as in England, but generally pursuing fixed occupations in the towns.* The Spaniards are middle-sized, thin, with well-proportioned limbs, dark hair, black piercing eyes, overshadowed by thick eyebrows, sharp features, and sallow complexions. The women are generally of middle or low stature, but gracefully formed, with almost aquiline noses, full, dark, expressive eyes, dark hair, and complexions varying from the flesh tint of N. Europe to the light olive of the Moors.

The character of the Spaniards has been very variously drawn; but though it differs materially in different provinces, its discriminating features are not to be mistaken. Though commonly slow, cautious, and deliberate, they become, when their passions are roused, rash, violent, and precipitate in the extreme. Though formal, they are courteous in their bearing, and, though grave, polite. The pride of the Spaniards is proverbial, and they entertain the most overweening opinion of themselves and their country. Though friendly, they are easily offended, vindictive, and more inclined to revenge real or fancied insults than to remember favours. They are fond to excess of show and ostentation, and will endure the greatest privations at home to make a display in public. Their vicious institutions and their climate have made them in the last degree indolent and procrastinating. They are infinitely less jealous now than formerly, and their bigotry has become passive rather than active. They have ceased, in fact, to care much about religion, and are satisfied if they observe the fasts and unmeaning mummeries which it enjoins. Their ignorance often makes them attached to what is most ruinous to themselves; and those who think to gain their favour by denouncing some flagrant abuse, frequently find, to their surprise, that it is the object of popular attachment. They are temperate in eating and drinking, though it may be doubted whether this be not more the consequence of necessity than of choice.

‘The listless indolence,’ says an observant traveller, Mr. Swinburne, ‘equally dear to the uncivilised savage and to the degenerated slave of

* The reader is referred, for a copious account of these singular people, to Borrow’s ‘Account of the Gypsies of Spain,’ 2 vols.

despotism, is nowhere more indulged than in Spain; thousands of men in all parts of the realm are seen to pass their whole day wrapped up in a cloak, standing in rows against a wall, or dozing under a tree. In total want of every excitement to action, the springs of their intellectual faculties forget to play, their views grow confined within the wretched sphere of mere existence, and they scarce seem to hope or foresee anything better than their present state of vegetation; they feel little or no concern for the welfare or glory of a country, where the surface of the earth is engrossed by a few overgrown families, who seldom bestow a thought on the condition of their vassals. The poor Spaniard does not work, unless urged by irresistible want, because he perceives no advantage accrue from industry. As his food and raiment are purchased at a small expense, he spends no more time in labour than is absolutely necessary for securing the scanty provision his abstemiousness requires. I have heard a peasant refuse to run an errand, because he had that morning earned as much already as would last him the day without putting himself to any further trouble. Yet I am convinced that this laziness is not essentially inherent in the Spanish composition, for it is impossible without seeing them to conceive with what eagerness they pursue any favourite scheme, with what violence their passions work upon them, and what vigour and exertion of powers they display when awakened by a bull-feast, or the more constant agitation of gaming—a vice to which they are superlatively addicted. Were it again possible, by an intelligent spirited administration, to set before their eyes, in a clear and forcible manner, proper incitements to activity and industry, the Spaniards might yet be roused from their lethargy, and led to riches and reputation; but I confess the task is so difficult, that I look upon it rather as an Utopian idea than as a revolution ever likely to take place.

Their soldiers are brave and patient of hardships; wherever their officers lead them, they will follow without flinching, though it be up to the mouth of a battery of cannon; but unless the example be given them by their commander, not a step will they advance. Most of the Spaniards are hardy, and, when once engaged, go through difficulties without murmuring, bear the inclemencies of the season with firmness, and support fatigue with amazing perseverance. They sleep every night in their cloaks on the ground, are sparing in diet, perhaps more from a sense of habitual indigence than from any aversion to gluttony; whenever they can riot in the plenty of another man's table, they will gormandise to excess, and, not content with eating their fill, will carry off whatever they can stuff into their pockets. I have more than once been a witness to the pillage of a supper by the numerous beaux and admirers which the ladies lead after them in triumph wherever they are invited. They are fond of spices, and scarce eat anything without saffron, pimento, or garlic; they delight in wine that tastes strong of the pitched skin, and of oil that has a rank smell and taste; indeed, the same oil feeds their lamp, swims in their pottage, and dresses their salad; in inns the lighted lamp is often handed down to the table, that each man may take the quantity he chooses. Much tobacco is used by them in smoking and chewing. All these hot dry kinds of food, cooperating with the parching qualities of the atmosphere, are assigned as causes of the spare

melancholy nation: misery and discontent have cast a gloom over them, increased, no doubt, by the long habit of distrust and terror inspired by the Inquisition; yet every village still resounds with the music of voices and guitars; and their fairs and Sunday wakes are remarkably noisy and riotous. They talk louder and argue with more vehemence than even the French or Italians, and gesticulate with equal, if not superior, eagerness. Like most people of southern climates, they are dirty in their persons, and overrun with vermin.

'The Spanish character,' says General Napier, 'is distinguished by inordinate pride and arrogance. Dilatory and improvident, the individual as well as the mass, all possess an absurd confidence that every thing is practicable which their heated imaginations suggest: once excited, they can see no difficulty in the execution of a project, and the obstacles they encounter are attributed to treachery. Kind and warm in his attachments, but bitter in his anger, the Spaniard is patient under privations, firm in bodily suffering, prone to sudden passion, vindictive, bloody, remembers insult longer than injury, and cruel in his revenge. There is not upon the face of the earth a people so attractive in the friendly intercourse of society. Their majestic language, fine persons, and becoming dress, their lively imagination, the inexpressible beauty of their women, and the air of romance which they throw over every action, and infuse into every feeling, all combine to delude the senses and impose upon the judgment. As companions, they are, incomparably, the most agreeable of mankind; but danger and disappointment attend the man who, confiding in their promises and energy, ventures upon a difficult enterprise. "Never do to-day what you can put off till to-morrow," is the favourite proverb in Spain, and rigidly followed.'

In Spain there is a good deal of aristocratic pride, and the distinction of ranks is much attended to. The *hidalgos*, or gentry, claim to be descended from those Spaniards who, on the subjugation of the rest of the country by the Moors, found an asylum in the fastnesses of the northern provinces, whence they again gradually spread their conquering arms over the whole country. Besides the *hidalgos de sangre*, or by descent, there are also *hidalgos de privilegio*, or by office, conferred on them by the sovereign; but of these there are comparatively few. According to the official returns, there were in the kingdom, in 1787, 480,589 *hidalgos*, of whom no fewer than 401,040 belonged to the Asturias, Biscay, Burgos, Galicia, and Leon. Even at the present time, the titled nobility of the kingdom is very numerous. It consisted in 1863 of 82 dukes, all *grandees* of Spain; 722 marquises, of whom 54 *grandees*; 558 counts, of whom 59 *grandees*; 74 viscounts; and 67 barons. There are about half a million persons belonging to the untitled nobility. The *grandees* of Spain, who are the real nobility of the country, are the descendants of those who, in consideration of their eminent services, acquired the privilege of speaking in the cortes covered in presence of the king. A man may be a *titulado*, that is, he may enjoy the title of duke, marquis, or count, without being noble; and in Spain, in fact, such titles are of little more consequence than that of baronet in Great Britain. The *hidalgos* formerly enjoyed various privileges, but these have now been very much curtailed. Among others, they could entail lands or establish ma-

SEVILLE.) The diet of the middle and higher classes consists of chocolate for breakfast, with mutton, beef, and pork, especially the latter, dressed in various ways, and accompanied by cabbage, garbanzos (Spanish beans), onions, and large peas called *chichoros*. The olla, or *cocido*, is a favourite dish; and the sausages (*chorizos*) of Castile are said to be about the best in Europe. Wine is used only in small quantities, and the kinds in common use are seldom much stronger than the low-priced wines of France. The *siesta*, or repose during the heat of the day, is customary to all classes throughout Spain. From 1 to 4 o'clock, in Madrid and most other cities, the shops are either shut, or a curtain drawn before the door; the shutters of every window are closed, and scarce a respectable person is to be seen in the street. But the moment the *siesta* is over, all is again instinct with life and bustle. Exercise is usually taken in the evening, when nearly the entire pop. is abroad. *Tertulias*, or evening parties, are very frequent in the great towns. The theatre is little frequented. *Bull-fights*, though discountenanced by government, are in Spain what the circus was in ancient Italy, the national pastime, favourite resort, and chief amusement of all classes. Though by no means entitled to high rank as musicians, the Spaniards have considerable musical taste; and all orders are passionately fond of dancing, the national dances being the *bolero* and *fandango*; the former a graceful easy movement, the latter a dance of freer and more licentious character, seldom seen in good society.

The lower classes live on wretched fare, rarely eating meat, and fish only occasionally, except on the coast. The farming labourers fare somewhat better, the chief articles of food being bread, soup, garlic, bacon, and *garbanzos*, with the accompaniments of wine and oil. Notwithstanding the suppression of the convents, mendicity is still exceedingly prevalent; and perhaps the only remedy for this inveterate disease is the abolition of all endowments for paupers, and the establishment of some provision for the poor, as in England. Cloaks and broad-brimmed hats are very generally worn by the men; and the mantilla and fan are in universal use among females.

Nearly all travellers in Spain give descriptions of bull-fights. 'The bull-fight,' says a well-known English traveller, Mr. Inglis, 'is the national game of Spain, and the love of the Spaniards for this spectacle is almost beyond belief. Monday, in Madrid, is always, during the season of the bull-fights, a kind of holiday; every body looks forward to the enjoyment of the afternoon, and all the conversation is about *los toros*. Frequency of repetition makes no difference to the true amateur of the bull-fight; he is never weary of it; at all times he finds leisure and money to dedicate to his favourite pastime. The spectacle is generally announced, in the name of his majesty, to begin at four o'clock; and, before then, all the avenues leading towards the gate of Alcala are in commotion; the Calle de Alcala, in particular, throughout its whole immense extent, is filled with a dense crowd, of all ranks and conditions, pouring towards the gate. A considerable number of carriages are also seen, even the royal carriages; but these arrive later; and there are also many hack cabriolets, their usual burden being a peasant and two girls dressed in their holiday clothes, for there is no way of showing gallantry so much approved, among the lower orders, as *treating* to a bull-fight. I had been able to secure a place in one of the best boxes. The spectacle was most imposing: the whole amphitheatre, said to con-

round and round, and from the ground to the ceiling, carrying the imagination back to antiquity, and to the butcheries of a Roman holiday. The arena is about 230 ft. in diameter; this is surrounded by a strong wooden fence, about 6 ft. in height, the upper half retiring about a foot, so as to leave, in the middle of the fence, a stepping-place, by which the men may be able, in time of danger, to throw themselves out of the arena. Behind this fence there is an open space about 9 ft. wide, extending all the way round, meant as a retreat; and where, also, the men in reserve are in waiting, in case their companions should be killed or disabled. Behind this space is another higher and stronger fence, bounding the amphitheatre, for the spectators: from this fence the seats decline backwards, rising to the outer wall; and above these there are boxes, which are all roofed, and are, of course, open in front. The best places in the boxes cost about 4s.; the best in the amphitheatre below, about 2s. 6d.; the commonest place, next to the arena, cost 4 reals. . . . The picadors are mounted on horseback, each holding a long lance or pike, and are the first antagonists the bull has to encounter; they stationed themselves on different sides of the area, about 20 yards from the door at which the bull enters; and at a flourish of trumpets the gate flew open, and the bull rushed into the area; this produced a deafening shout, and then total silence. The bulls differ very widely in courage and character: some are rash,—some cool and intrepid,—some wary and cautious,—some cowardly,—some, immediately upon perceiving the horse and his rider, rush upon them; others run bellowing round the arena,—some make towards one or other of the *chulos*, who, at the same moment that the bull appears, leap into the arena with coloured cloaks upon their arms; others stop, after having advanced a little way into the arena, look on every side, and seem uncertain what to do. The blood of the bull is generally first spilt: he almost invariably makes the first attack, advancing at a quick trot upon the picador, who generally receives him upon his pike, wounding him somewhere about the shoulder. Sometimes the bull, feeling himself wounded, retires to meditate a different plan of attack; but a good bull is not turned back by a wound,—he presses on upon his enemy, even if, in doing so, the lance be buried deeper in his flesh. Attached to the mane of the bull is a crimson riband, which it is the great object of the picador to seize, that he may present to his mistress this important trophy of his prowess. I have frequently seen the riband torn off at the moment that the bull closed upon the picador.

'The first bull that entered the arena was deficient both in courage and cunning: the second was a fierce bull of Navarre, from which province the best are understood to come: he paused only for a moment after entering the arena, and then instantly rushed upon the nearest picador, who wounded him in the neck; but the bull, disregarding this, thrust his head under the horse's belly, and threw both him and his rider upon the ground: the horse ran a little way, but, encumbered with trappings, he fell; and the bull, disregarding for a moment the fallen picador, pursued the horse, and, pushing at him, broke the girths, and disengaged the animal, which, finding itself at liberty, galloped round the arena, a dreadful spectacle, covered with gore, and its entrails trailing upon the ground. The bull now engaged the *chulos*: these young men show great dexterity, and sometimes considerable courage, in the running fight, or rather play, in which they engage the bull, flapping their cloaks in his face, and

zigzag when pressed, and throwing down the garments to arrest his progress a moment, and then vaulting over the fence, an example which is sometimes followed by the disappointed animal. But this kind of warfare the bull of Navarre seemed to consider child's play; and leaving these cloaked antagonists, he made furiously at the other picador, dexterously evading the lance, and burying his horns in the horse's breast: the horse and his rider extricated themselves, and galloped away; but suddenly the horse dropped down, the wound having proved mortal.

'The *banderilleros* then entered: their business is to throw darts into the neck of the bull; and, in order to do this, they are obliged to approach with great caution, and to be ready for a precipitate retreat; because it sometimes happens that the bull, irritated by the dart, disregards the cloak which the *banderillero* throws down to cover his retreat, and closely pursues the aggressor. I saw one *banderillero* so closely pursued, that he saved himself only by leaping over the bull's neck. The danger, however, is scarcely so great as it appears to the spectator to be, because the bull makes the charge with his eyes shut. The danger of the picador who is thrown upon the ground is much greater; because, having made the charge, the bull then opens his eyes, and the life of the picador is only saved by the address of the *chulos*, who divert the attention of the victor. Generally the *banderilleros* do not make their appearance until the bull appears, by his movements, to decline the combat with the picadors, which he shows by scraping the ground with his feet, and retiring. If the bull show little spirit, and the spectators wish that he should be goaded into courage, the cry is '*fuego*,' and then the *banderilleros* are armed with darts, containing a kind of squib, which explodes while it sticks in the animal's neck.

'When the people are tired of the *banderilleros*, and wish to have a fresh bull, they signify their impatience in the usual way, and the signal is then given for the *matador*, whose duty it is to kill the bull. The *matador* is in full court dress, and carries a scarlet cloak over his arm and a sword in his hand: the former he presents to the bull, and when the bull rushes forward, he steps aside and plunges the sword in the animal's neck; at least so he ought to do, but the service is a dangerous one, and the *matador* is frequently killed. Sometimes it is impossible for the *matador* to engage upon equal terms a very wary bull, which is not much exhausted. This was the case with the sixth bull which I saw turned out: it was an Andalusian bull, and was both wary and powerful. Many times the *matador* attempted to engage him, but without success; he was constantly upon the watch; always disregarding the cloak, and turning quick round upon the *matador*, who was frequently in imminent danger. At length the people were tired of this lengthened combat, and, seeing no prospect of its ending, called for the *semi-luna*, an instrument with which a person skulks behind, and cuts the hamstring of the animal: this the bull avoided a long while, always turning quickly round, and even after this cruel operation was performed, he was still a dangerous antagonist, fighting upon his knees, and even pursuing the *matador*. The moment the bull falls he is struck with a small stiletto, which pierces the *cerebellum*; folding doors, opposite to those by which the bull enters, are thrown open, and three mules, richly caparisoned and adorned with flags, gallop in; the dead bull is attached by a hook to a chain, and

them: this is the work of a moment,—the doors close,—there is a new flourish of trumpets, and another bull rushes upon the arena.

'And how do the Spaniards conduct themselves during all these scenes? The intense interest which they feel in this game is visible throughout, and often loudly expressed; an astounding shout always accompanies a critical moment: whether it be the bull or the man who is in danger, their joy is excessive, but their greatest sympathy is given to the feats of the bull. If the picador receives the bull gallantly, and forces him to retreat; or, if the *matador* courageously faces and wounds the bull, they applaud those acts of science and valour; but if the bull overthrow the horse and his rider, or if the *matador* miss his aim, and the bull seems ready to gore him, their delight knows no bounds. And it is certainly a fine spectacle to see the thousands of spectators rise simultaneously, as they always do when the interest is intense: the greatest and most crowded theatre in Europe presents nothing half so imposing as this. But how barbarous, how brutal, is the whole exhibition! Could an English audience witness the scenes that are repeated every week in Madrid? A universal burst of "shame!" would follow the spectacle of a horse, gored and bleeding and actually treading upon his own entrails, while he gallops round the arena: even the appearance of the goaded bull could not be borne,—panting, covered with wounds and blood, lacerated by darts, and yet brave and resolute to the end. The spectacle continued two hours and a half, and, during that time, there were seven bulls killed, and six horses. When the last bull was despatched, the people immediately rushed into the arena, and the carcass was dragged out amid the most deafening shouts.'

Historical Notice.—After being in part occupied by the Carthaginians, Spain became the prey of the Romans, by whom she was finally subdued in the reign of Augustus. The country enjoyed a lengthened period of tranquillity and prosperity under the sway of the Romans, but was invaded at the beginning of the 5th century, by the Vandals and other Gothic tribes, and in the next century the Visigoths acquired the ascendancy, and established their supremacy in every part of Spain. The latter, however, were not long permitted peaceably to enjoy this fine and fertile country. In 711 a powerful Arabian force crossed the Strait of Gibraltar, and having defeated the Visigoths, and killed Roderick, their king, in a great battle near Xeres de la Frontera, in Andalusia, they speedily overran the whole country, driving the remains of the Visigoths into the fastnesses of the North, where they did not think it worth their while to follow them. But the Saracens having been signally defeated by Charles Martel, in France, and their fiery zeal having cooled, the Christians began to descend from the mountains of the Asturias, and gradually recovered portions of the lower countries. The kingdom of Leon was founded under Alphonso I., about the middle of the 8th century; and from that period, notwithstanding the superior civilisation, learning, and splendour of the Saracenic sovereigns, the Christian power was progressively increased at the expense of that of the Mohammedans.

The provinces that were wrested from the Moors were not formed into one, but into several independent states, which however were, for the most part, gradually merged in Castile and Aragon. In the 15th century these two leading states were

with Isabella of Castile; and, having conquered Granada, the last possession of the Moors in 1492, and subsequently seized all that part of Navarre to the S. of the Pyrenees, the whole of Spain was united under the same government, and Naples being at the same time conquered, and America discovered, Ferdinand, besides being one of the ablest princes of his day, became the most powerful.

Ferdinand was succeeded by his grandson, Charles I., known in history as Charles V., emperor of Germany, who added, by his father's side, the archduchy of Austria and the Low Countries to the vast inheritance of Spain and the Indies, now augmented by the conquest of Mexico and Peru. Charles, the most illustrious by far of the Spanish sovereigns, was succeeded in his Spanish dominions and in the Low Countries by his eldest son, Philip II., the husband of Queen Mary of England, who, having conquered Portugal, in 1580, reduced the entire peninsula into one kingdom.

The conquest of Portugal may be said to mark the culminating point of the Spanish monarchy. The tyranny and intolerance of Philip had already, indeed, raised a rebellion in the Low Countries; which, after a struggle unexampled for duration, for the sacrifices it entailed on the weaker party, and for its beneficial consequences, terminated in the independence of the seven united provinces. The power of Spain now began rapidly to decline. The seeds of this decay had, however, been profusely scattered in the reign of Ferdinand and Isabella. The establishment of the Inquisition and of the censorship of the press, and the attacks made on the ancient rights and liberties of the nation, paralysed its energies; and the unsuccessful rebellion of the commons of Castile under Charles V., and the brutal and ferocious bigotry of Philip II., extinguished every spark of civil and religious liberty, and subjected the country to the vilest of all despotisms, that which principally depends for support on intolerance, superstitious zeal, and religious quackery. Under such a government Spain either continued stationary or retrograded, while the surrounding nations made rapid advances in the career of civilisation. Her sovereigns were mere imbecile despots; and on the death of Charles II., the last prince of the Austrian line, the monarchy was dismembered; and it was the arms of Louis XIV., and the talents of the Duke of Berwick, and not the will of the deceased monarch, or the wishes of the Spaniards, that placed a Bourbon dynasty on the throne.

The new dynasty was less intolerant than that to which it succeeded, and some reforms were introduced during the course of last century. These, however, were of comparatively slight importance; and it was clear that the abuses under which the country laboured were so deeply seated, and so entwined with every existing institution, and with the habits and prejudices of the people, that they could not be eradicated, nor even materially abated, otherwise than by a revolution. This was brought about by the weakness of the Spanish sovereigns and the immeasurable ambition of Napoleon. Not satisfied with a considerable subsidy from Spain, Napoleon wished to reduce it to the state of a prov. of France; and with this view he procured the abdication of the reigning monarch, Charles IV., and proceeded to seat his brother Joseph on the vacant throne. The opposition made by the Spaniards to this transfer, and the important results to which it led, are well known, and need not be here alluded to. The pride of the nation was hurt; and the priests, who knew that the ascendancy of the French would

be a death-blow to them, did not fail to set them in the most odious light, and used every possible means to make them the objects of fanatical hatred. But the arms of England, and the extraordinary talents of her great general, more than the fanaticism of the Spaniards, repulsed the French beyond the Pyrenees. It is unnecessary to recapitulate the events that followed the restoration of Ferdinand. After years of civil war and bloodshed, a liberal government has happily been established. Whether it be destined to last, time only can show; but if it be so there can be no doubt that the abuses which still infest the country will be gradually exterminated, her gigantic resources developed, and the well-being of her people, and her power and importance in the scale of nations, vastly increased.

SPALATRO, a city and sea-port of Dalmatia, Austria, on the Adriatic, opposite the island of Brazza, lat. 43° 30' 12" N., long. 16° 26' 33" E. Pop. 10,920 in 1857. The city is surrounded by ruined walls, is the seat of an archbishop, has a cathedral, and several other churches, a lazaretto, several convents, a gymnasium, and normal school, with barracks, and a military hospital. It has both an outer and inner harbour, the former affording secure anchorage to vessels of any burden. It has rather a considerable trade, consisting principally in the exportation of the produce of the surrounding country, as well as of products brought from Bosnia, including cattle, horses, figs, rosoglio and wax. There are thermal springs in the immediate vicinity of the town.

Spalatro possesses the ruins of the magnificent palace built by Diocletian. The emperor belonged to Salona, a now ruined city about 3 m. NNE. from Spalatro; and being warmly attached to his native country, he retired thither to spend the remainder of his days, after his abdication of the imperial purple, A.D. 305. From the vastness of the palace, it is all but certain that he had begun its erection long previously to his abdication, though, most probably, in the contemplation of that extraordinary event. The situation seems to have been most judiciously chosen. 'The soil,' says a traveller (Adam's Ruins of Spalatro), 'is dry and fertile, the air pure and wholesome; and, though extremely hot during the summer months, this country seldom feels those sultry and noxious winds to which the coasts of Istria, and some parts of Italy, are exposed. The views from the palace are no less beautiful than the soil and climate are inviting. Towards the W. lies the fertile shore that stretches along the Adriatic; in which a number of small islands are scattered in such a manner as to give this part of the sea the appearance of a great lake. On the N. side lies the bay which led to the ancient city of Salona; and the country beyond it appearing in sight forms a proper contrast to that more extensive prospect of water which the Adriatic presents both to the S. and the E. Towards the N., the view is terminated by high and irregular mountains, situated at a proper distance, and, in many places, covered with villages, woods, and vineyards.' The want of good water, its only defect, was obviated by the construction of an aqueduct, which conveyed an abundant supply from Salona. The palace was in the form of a quadrangle, flanked by 16 towers. Its longer sides, including the towers, were each 698 ft. in length, and its shorter 592 ft., so that it covered in all nearly 9½ English acres. It was constructed of a beautiful freestone, but little inferior to marble. 'Four streets,' says Gibbon (cap. 13) 'intersecting each other at right angles, divided the several parts of this great edifice, and the

approach to the principal apartment was from a very stately entrance, still denominated the golden gate. The approach was terminated by a *peristylum* of granite columns; on one side of which we discover the square temple of *Æsculapius* (now the church of St. John the Baptist), and on the other the octagon temple of Jupiter (now the cathedral). The buildings were all lighted from the top, and appear to have consisted only of one story.

Diocletian expired in this splendid retreat, A.D. 313. The emperor Constantine Porphyrogenitus, who could only see the palace in a neglected and decaying state, affirms that no description could convey a proper idea of its grandeur. Even now, though the town of Spalatro has been principally built out of its ruins, its prodigious remains give a vivid idea of the wealth and magnificence of the Roman emperors.

SPALDING, a market town and par. of England, co. Lincoln, wapent. Elloe, div. Holland, on the Welland, 33 m. SSE. Lincoln. Area of par. 12,070 acres. Pop. 8,723 in 1861. Though within the fens, the town is well drained, the streets clean and well paved, and the houses have a neat appearance. It consists of four principal streets, and has a spacious market-place, at one end of which is the town-hall. In the same open space is the house of correction for the division of Holland, a brick building, constructed at an expense of 16,000*l.*, but said to be in several respects defective. The par. church, originally erected in the 18th century, but rebuilt, with some additions, during the 15th, is a light structure in the perpendicular style, with a fine tower and crocketed spire, and a handsome porch. There are places of worship for Independents, Baptists, Wesleyans, Friends, and other dissenters, and many charities, including Queen Elizabeth's Grammar School, with common blue-coat, and other schools. There are assembly and card-rooms in the town-hall, a subscription library and a literary club; and formerly an antiquarian society was established at Spalding, of which Sir Isaac Newton, Sir Hans Sloane, Dr. Stukely, and other eminent persons, were members. The Welland is navigable thus far for sloops of 50 tons burden, which come up to the centre of the town, and land or take in cargoes at the doors of the warehouses. Spalding has a considerable trade in corn, coal, and Yorkshire and Norfolk wool; and its weekly market is the largest in the county for the fat cattle reared in the adjacent marsh lands. Most part of the neighbourhood is appropriated to grazing. It has long been the principal seat of the law-courts for the div. of Holland. At present, quarter and petty weekly sessions are held in the town, and it has a county court.

SPANDAU, a strongly fortified town of Prussia, prov. Brandenburg, gov. Potsdam, at the junction of the Havel with the Spree, 7 m. W. Berlin, on the railway from Berlin to Hamburg. Pop. 13,911 in 1861, exclus. of a garrison of 2,272 men. Spandau is the state-prison of Prussia. Being filled with troops it has more the air of an enormous barrack than of a town; and is, in point of fact, so regarded. Both its citadel and penitentiary are deserving of notice; the former, on account of its position on an island of the Spree, the latter, because it is said to be managed with exceeding skill. The citadel is a regular square with 4 ramparts, 40 ft. in height, and good casements; the penitentiary was formerly the residence of the electors of Brandenburg, and has, on the average, nearly a thousand inmates, many of whom

of the disproportionate height of the houses. The church of St. Nicholas, constructed in the 16th century, has a great number of monuments. Spandau is the seat of a civil tribunal and a forest-board, and has some manufactures of woollen and linen cloths, tobacco pipes, and earthenware, with breweries and distilleries. It was the scene of Baron Trenck's captivity. It was taken by the Swedes in 1631, and the French in 1806.

SPANISH TOWN, (or *Santiago de la Vega*), the cap. and seat of the legislature of the Isl. of Jamaica, co. Middlesex, on the river Coire, about 6 m. from the sea, and 11 m. WNW. Kingston. It is the official residence of the governor and the commander-in-chief, and the seat of the court of chancery, and the supreme court of judicature; but has otherwise very little importance.

SPEY, a river of Scotland, in the Highlands. It has its source in Loch Spey, within about 6 m. of the head of Loch Lochy, and thence pursues a NE. course through Badenoch and Strathspey to Fochabers, below which it falls into the Moray Frith. It receives innumerable mountain streams, but no very important tributary. Following its windings, the course of the Spey is about 96 m.; but it is only about 75 m. in a direct line from its source to its mouth. It drains about 1,800 sq. m. of country, and, besides being one of the largest, is admitted to be the most rapid of Scotch rivers. Being fed wholly by mountain torrents, it is very liable to sudden and destructive inundations. It flows through what is the best wooded portion of the Highlands. The Duke of Richmond (proprietor of the Gordon estates) has several valuable salmon fisheries on this river.

SPEZZIA (Ital. *Spezia*), a town and sea-port of N. Italy, prov. Genoa, at the extremity of the gulf of its own name, 50 m. ESE. Genoa, on the road from Genoa to Leghorn. Pop. 11,005 in 1862. The town is finely situated, is tolerably well built, and has an excellent harbour. Napoleon I., aware of the advantages of its position, is said to have intended making it a naval station and arsenal; and, since he drew attention to its importance, its commerce has improved. The gulf of Spezzia (anc. *Portus Lunæ*) is about 8½ m. in length, by an average breadth of half as much. It exhibits in one part the phenomenon of a powerful spring of fresh water, which bubbles up from the bottom, and preserves its purity, unmixed by the surrounding salt water, nearly to the surface.

SPILSBY, a market town and par. of England, co. Lincoln, soke Bolingbroke East, in Lindsey, on an eminence near the Limb, 10 m. from the sea, and 27 m. ESE. Lincoln. Area of par. 2,340 acres. Pop. 1,467 in 1861. The town consists of 4 streets, diverging from a central square, which forms the market place. The latter is ornamented on its E. side by the market cross, a plain octagonal shaft, with a quadrangular base, elevated on 5 steps; and on the W. by the town-hall, built in 1764. The par. church is an irregular structure, consisting of 2 aisles, with a handsome embattled tower at the W. end, said to have been built in the reign of Henry VII. In the interior are several antique monuments. The living, a perpetual curacy, in the gift of Lord Willoughby d'Eresby, is worth 109*l.* a year. Near the town is a new sessions-house and prison for the div. of Lindsey, occupying about 2 acres of ground, with a Doric portico in front, constructed at a cost of 25,000*l.* Spilsby being the principal town in the S. part of Lindsey, is the seat of the general quarter sessions, and of petty sessions. It has several charities; particularly a free school, founded by Lord Willoughby in 1611,

are about 50 pay-scholars. Market-days, Mondays; fairs, Monday before and after Whit-Monday, usually, and 2nd Monday in July.

SPIRES (Germ. *Speier*; an. *Noviomagus*), a city of W. Germany, in Rhenish Bavaria, of which it is the cap., on the Rhine, where it is joined by the Speyer, 16½ m. NE. Landau, on a short branch of the railway from Mannheim to Strasburg. Pop. 12,810 in 1861. Spires is supposed to be one of the most ancient as it long was one of the chief cities of Germany. In the 14th century it is stated to have had 27,000 inhabs.; and in the 16th and 17th centuries it was the seat of the imperial chamber (*Reichskammergut*), or superior court of appeal for the Germanic empire; and, previously to 1689, it had 5 suburbs, enclosed within ramparts, 13 gates, and 64 towers provided with artillery. But in that year it was taken and all but destroyed by the troops of Louis XIV.; and though rebuilt about ten years afterwards, it has never attained its previous prosperity. It still occupies a large extent of ground, but its walls, which are entered by 5 gates, enclose numerous open spaces. The cathedral, which withstood the attempts of the French wholly to destroy it, is the most remarkable building. It was founded and completed in the 11th century, on the site, as is alleged, of a Roman temple of Venus; and it is perhaps the most stupendous edifice existing in the round arched style. Nine German emperors, and many other celebrated personages, have been buried in it, but their tombs were ransacked and mutilated by the French in 1689 and 1794.

Since 1810, however, the Bavarian government has done much to repair the interior of the cathedral, and the Duke of Nassau has erected a splendid modern monument to his ancestor the Emp. Adolph. Spires has numerous R. Cath. and two Lutheran churches, a gymnasium, an orphan asylum, house of correction, forest school, botanic garden, and a hall of antiquities, in which many curiosities found in the province are deposited. The outer walls are still standing of an old palace, in which no fewer than 49 diets have been held. Of these the most celebrated by far was that held in 1549, on the subject of the religious disputes that then agitated the empire. On this occasion the majority, consisting of the party attached to the church of Rome, agreed to a resolution by which all changes in the doctrine and discipline of the established church, not previously approved by a general council, were declared to be unlawful and of no effect. The minority, including the princes and others attached to the doctrines of the Reformers, presented, on the 19th of April, 1529, a protest against the above resolution; and from this circumstance they acquired the name of *Protestants*, which has since become the distinguishing term for those who have renounced the communion of the church of Rome, how much soever they may differ among themselves.

Noviomagus was included by the Romans in Germania Prima. It was the winter quarters of Caesar, by whom it was fortified, as a check on the incursions of the neighbouring Allemanni. Several Roman, Frank, Saxon, and Swabian emperors embellished and made it their residence; and Henry V. of Germany gave the citizens of Spires a monopoly of the transit trade of the Rhine, and other valuable privileges. During the French ascendancy Spires was the cap. of the dep. of Mont Tonnerre.

SPIZBERGEN (formerly called *E. Greenland*), a group of islands in the Arctic Ocean, being the most N. land hitherto discovered, between the 76th and 81st degs. of N. lat., and the 9th and 23rd of E. long., about 420 m. NNW. the

North Cape, and nearly midway between Greenland and Nova Zembla. There are four principal islands, Spitzbergen Proper, NE. and SE. Islands, and Prince Charles's Island to the W. of the others; besides many islets and rocks. Their united area does not appear to be equal to that of Iceland. They rise in many places into mountains of from 1,000 to 2,000 ft. in height, the peaks of which are covered with snow, coeval, perhaps, with their creation. The coasts are iron-bound, presenting only a few tolerable harbours: the best of these is Smcerenberg, on the W. coast, where the Dutch had once a considerable establishment. The surface is, for the most part, destitute of any vegetable or animal products; but there are a few bears and foxes, which live upon fish, &c. Spitzbergen was formerly a principal station of the whale-fishers; but the whales have, for a considerable period, been nearly extirpated in the surrounding seas, and it is now but little visited. It was originally discovered by Sir Hugh Willoughby in 1533, and was first visited by the Dutch in 1595. Its shores were principally surveyed by Captain Phipps, in 1773.

SPOLETO (an. *Spolitium*), a city of Central Italy, prov. Perugia, on the slope of an isolated rocky hill, 33 m. SE. Perugia, and 60 m. N. Rome, on the railway from Rome to Ancona. Pop. 19,261 in 1862. The city is connected, across a deep ravine, with a neighbouring hill, by means of a stupendous aqueduct, serving both as a conduit and a bridge, raised upon a lofty range of 10 pointed arches; which, though repaired in modern times, is, no doubt, of Roman origin. The cathedral, built in the time of the Lombards, is of a very mixed style, having a front of five Gothic arches supported by Grecian pillars, while, internally, it is in the form of a Latin cross, with a double range of Corinthian columns. It has some showy decorations; near it is a handsome fountain. The citadel, a massive stone fortress, built by Theodoric, and repaired by Narses, stands on a height overlooking the town. The Temple of Concord has been converted into a church; but in addition to it, Spoleto has two arches, a bridge, the ruins of a theatre, and several other Roman remains: on one of the gates is an inscription importing that Hannibal's troops were repulsed in an attack on the town, after the battle of Trasymene. It has a few insignificant manufactures of woollen stuffs and hats. Under the French it was the cap. of the dep. Trasymene. It was of incomparably greater importance in antiquity than in modern times, and is reckoned by Florus among the *municipia Italiae splendidissima*.

ST. HELENA, an island of the S. Atlantic Ocean, famous as the scene of Napoleon's imprisonment and death. It belongs to Great Britain, and is situated 800 m. SE. from Ascension Island, and 1,200 m. W. from the coast of Benguela, in S. Africa; lat. 15° 15' S., long. 5° 46' W. Length, 10½ m.; breadth, 6½ m.; area, 30,300 acres. Pop. 6,444 in 1861. St. Helena appears from a distance like the summit of a lofty submarine mountain, rising abruptly from the shore in rugged and almost perpendicular cliffs, varying from 300 to 1,500 ft. in height, diversified in a few places with deep narrow ravines, descending to the sea, and forming difficult landing-places for the fishermen. In the largest of these, towards the NW., is James' Town, the cap. and port of the island. The interior is a plateau, about 1,500 ft. above the sea, divided into two unequal parts by a ridge of mountains rising about 500 ft. above the plain, and 2,000 ft. above the sea: the highest summit of this ridge, called Diana's Peak, is 2,703 ft. in height. The geological formation of the island

consists almost entirely of basalt, over which in some parts are strata of limestone mingled with tufa and other igneous substances, proving it to have once been the seat of volcanic action. A deep crater-like dell, however, called the Devil's Punch-bowl, is the only feature at all resembling an extinct volcano. The climate is mild, and little variable, the thermometer ranging between 57° and 70° Fahr. in winter (June, July, and Aug.), and between 68° and 72° in summer (Jan., Feb., and March). Rain is common, especially in Feb. and July; and the frequency of cloudy days tends greatly to moderate the heat. The influence of the climate over the constitution of residents in the island is, however, said to be most disastrous. According to O'Meara (*Voice from St. H.*, ii. 438), it is 'extremely unhealthy, hepatitis and dysentery prevailing to an extent and with a severity seldom paralleled, so that very few persons pass their 45th year.' About a fifth part of the entire surface is covered with soil, which, though not deep, is rich and productive. Luxuriant pastures are found on the high lands: agriculture, however, is but little attended to; and the inhabs. mostly depend on foreign supplies for their support. The valleys are chiefly laid out in garden ground: and here may be seen near each other, and all flourishing alike, the mango, banana, tamarind, and sugar-cane of the tropics, the orange, citron, grape, fig, and olive of S. Europe, and the apple, gooseberry, and currant of a still colder region. The yam and all the European vegetables are abundant, three crops of potatoes being often raised from the same ground within the year. The tops and sides of the hills are covered with the cabbage tree, dog-wood tree, and gumwood; and the oak, also, has been introduced. The *Palma Christi* and common blackberry are so luxuriant as to be eradicated with difficulty. Cattle and sheep are not numerous, the latter being barely sufficient to supply the wants of the shipping. Goats graze in immense numbers on the high grounds. Neither birds nor beasts of prey, if we except rats, are found; but the latter are numerous and destructive, and there are many varieties of troublesome and poisonous insects. Game is abundant, and the coast furnishes excellent fish. Whales and turtles are often seen near the shore, especially in Jan. and April.

St. Helena, of which the East India Company were 'the lords proprietors' till 1834, is now under a military governor, assisted by a civil secretary; and the laws are administered by the chief judge. It is still used as a place of refreshment for vessels sailing northward on the Atlantic, those proceeding southward not being able to make the island. Its commerce is trifling; the value of the imports, in 1863, amounted to 110,537*l.*, while the exports, in the same year, were of the value of only 24,107*l.*

James' Town, the port and the residence of the authorities, is the only town. The anchorage is good in 12 fathoms water, and the port is well protected from the winds. The town is entered by an arched gateway, within which is a spacious parade lined with official residences. The church, a handsome building, fronts the gateway; and close by it a street branches off into the inner parts of the town. The shops are plentifully supplied with English and Asiatic products, but the prices are invariably very high. The principal inhabs. reside on the higher and cooler parts of the island, and visit James' Town only on Sundays, or when the want of supplies obliges them to come to its shops and market. One of the handsomest of these villas is Plantation House, a

the governor, situated in the midst of extensive grounds, adorned with a variety of fine trees and shrubs.

Longwood, the residence of Napoleon I., stands on the plateau, in the middle of an extensive park. When first occupied by the ex-emperor, it was of very limited dimensions; but some additions were subsequently made to it. After Napoleon's death, the house was for some time uninhabited, but it has more recently been restored to its former state.

St. Helena was discovered on the 21st of May (St. Helena's day), 1502, by Juan de Noya, a Portuguese; but no establishment was formed, nor was the island inhabited, till the Dutch became its masters in the middle of the 16th century. Captain Munden, in 1673, took it from the Dutch; and it was soon afterwards granted by Charles II. to the English East India Company, who, with the exception of the period of Napoleon's imprisonment, held the proprietorship down to 1834, when it was restored to the English government.

The fame of this little island rests on its having been the prison of Napoleon I. It is unnecessary to particularise the circumstances connected with this memorable event. Suffice it to say, that, after the battle of Waterloo, and his second abdication, Napoleon, having retreated to Rochefort, addressed on the 13th of July, 1815, the following letter to the Prince Regent, afterwards George IV.:—

'Altesse Royale,

'En butte aux factions qui divisent mon pays, et à l'inimitié des plus grandes puissances de l'Europe, j'ai terminé ma carrière politique, et je viens, comme Themistocle, m'asseoir au foyer du peuple Britannique. Je me mets sous la protection de ses lois, que je réclame de V. A. R., comme du plus puissant, du plus constant, et du plus généreux de mes ennemis. 'NAPOLEON.'

But though Napoleon was more than entitled to compare himself to Themistocles, he erred widely in supposing that the Prince Regent was another Artaxerxes. It was, no doubt, indispensable for the tranquillity of Europe and the world, and for the advancement of the projects of the allied sovereigns, that Napoleon should be placed under restraint. But a sense of what was due to themselves, and still more of what was due to the extraordinary individual the chance of war had placed in their power, should have secured him the best asylum and the most generous treatment consistent with perfect security. It is needless to contrast what they should have done with what they actually did. The sending of Napoleon to St. Helena, and his treatment while there, constitute the most discreditable chapter in the history of modern royalty. It is painful to have to reflect that the government of such a country as England should have taken a conspicuous part in this unworthy treatment of a fallen foe. Every reader of ancient history heartily execrates the vindictive malignity with which the Romans pursued Hannibal. And yet, in comparing his treatment with that of Napoleon, it should be borne in mind that the Carthaginian hero never relaxed in his hostility to his ancient and hereditary enemies; he did not place himself in their hands, nor did he appeal to their generosity; and the probability is, that if they had got him into their power, they would have despatched him at once, and not have sent their illustrious captive to some miserable islet, to embitter and insult the few remaining years of his memorable life.

Napoleon arrived at St. Helena on the 13th of October, 1815, and there he expired on the 5th of

posited for 19 years in a humble grave, near his prison-house, were, in 1840, conveyed with great pomp and ceremony to France, where, agreeably to the wish expressed in his last will, they now repose in the Hôtel des Invalides, in Paris.

ST. MAWE'S, a market town and sea-port of England, co. Cornwall, hund. Powder, par. St. Just-in-Roseland, on the E. shore of Falmouth harbour, 2 m. ENE. Falmouth. Area of par. St. Just, 2,550 acres. Pop. 1,546 in 1861. The town consists of one irregularly-built street, at the foot of a hill facing the sea, the inhabs. being principally fishermen and pilots. The harbour of St. Mawe's is a creek belonging to that of Falmouth, the entrance to which is defended by St. Mawe's Castle, built in the time of Henry VIII. It is governed by a portreeve chosen at an annual court-leet. This inconsiderable place sent 2 mems. to the H. of C. from 1562 till the passing of the Reform Act, by which it was disfranchised. Markets on Fridays.

ST. THOMAS, one of the Virgin Islands in the West Indies, belonging to the Danes, in about lat. $18^{\circ} 20'$ N., long. 65° W., 36 m. E. Porto Rico. Area, 87 sq. m. Pop. 12,890 in 1861. Surface mountainous, and the island generally less fertile than St. Croix. Droughts and violent hurricanes are frequently experienced. Sugar and cotton are the principal products. St. Thomas has long been, and still continues to be, one of the principal emporiums in the West Indies. It owes this distinction partly to its convenient situation, partly to its spacious and safe harbour at St. Thomas, on the S. side of the island, and partly and principally to the moderation of the import duties, which vary from 1 to $1\frac{1}{2}$ per cent. St. Thomas has, in consequence, become a depôt for the supply of the neighbouring islands, goods being sent to it to be warehoused till opportunity offers for conveying them to their final destination. The great articles of importation are manufactured goods, principally from England, but partly, also, from other countries of Europe, with provisions and lumber from the United States. During 1863 the value of manufactured and other goods imported from Great Britain amounted to 811,200*l.*, or 4,206,000 dolls., of which 444,800*l.*, or 2,241,000 dollars in British vessels, and in foreign 392,400*l.*, or 1,962,000 dolls.; in which is not included 118,843 dollars, or 23,768*l.* value of 58,172 tons coals, 587 tons in excess of 1862, imported during 1863, of which 26,808 in British, and 313,634 in foreign bottoms. (Report of Mr. Lamb, British consul, in 'Commercial Reports'.)

ST. VINCENT. See VINCENT (St.).

STADE, a town of Hanover, cap. district of its own name, on the Schwinge, near its mouth, in the Elbe, 20 m. WNW. Hamburg. Pop. 8,269 in 1861. On the bank of the Elbe, adjacent to the town, is the castle of Brunshausen, near which a vessel is stationed to receive the toll exacted by the Hanoverian government on all vessels passing up the Elbe. Stade has three Lutheran churches, a gymnasium, a cavalry school and a central workhouse. Its inhabs. are engaged in manufactures of flannel, &c., and have some share in the transit trade on the Elbe.

STAFFA, a small island of Scotland, belonging to the Hebrides, famous for its basaltic columns and caverns, off the W. coast of the island of Mull, 9 m. NNE. Iona. It is of an oval shape, about $1\frac{1}{2}$ m. in circ., consisting of an uneven tableland, resting on cliffs of variable height, the highest being about 144 ft. above the sea. The cliffs, and the caves by which they are perforated, consist mostly of basaltic columns, triangular,

perpendicular, partly oblique or horizontal, and partly bent. The average diameter of the columns is about 2 ft.; but they sometimes extend to 3 and 4 ft. They are generally pentagonal and hexagonal; they sometimes, however, have 7 or 9 sides, but are rarely triangular or rhomboidal. They are not so exquisitely united, nor are their angles as sharp as those of the Giant's Causeway.

Except on the NE. shore of the island, at the landing-place, it is almost everywhere surrounded by cliffs hollowed with caverns. But the W. side being exposed to the full swell of the Atlantic, and beat by a heavy surge, has been comparatively little explored, and the principal caverns of which we have any certain information are on its E. side. Of these the most celebrated by far is Fingal's Cave. The height of the cave, from the surface of the water, at mean tide, to the centre of the ceiling or arch, is about 66 ft., the height of its sides 36 ft., and its depth 227 ft. Its sides are formed by ranges of nearly perpendicular columns; a deep channelled fissure, parallel to the sides, extends along the whole length of the ceiling, which is formed of the bottoms of columns whitened by the infiltration of carbonate of lime into their interstices. The sea never entirely ebbs from the cave, the inmost recesses of which may be discovered from without. In moderate weather boats sail up to its farthest extremity.

'It would be no less presumptuous than useless,' says Dr. McCulloch (Geology of the W. Islands) 'to attempt a description of the picturesque effect of that to which the pencil itself is inadequate. But if this cave were even destitute of that order and symmetry, that richness arising from multiplicity of parts combined with greatness of dimension and simplicity of style, which it possesses; still, the prolonged length, the twilight gloom half concealing the playful and varying effects of reflected light, the echo of the measured surge as it rises and falls, the transparent green of the water, and the profound and fairy solitude of the whole scene, could not fail strongly to impress a mind gifted with any sense of beauty in art or in nature.'

The noblest description of this magnificent cave is that given by the great minstrel:—

that wondrous dome
Where, as to shame the temples deck'd
By skill of earthly architect,
Nature herself, it seem'd, would raise
A minster to her Maker's praise!
Not for a meaner use ascend
Her columns, or her arches bend;
Nor of a theme less solemn tells
That mighty surge that ebbs and swells,
And still, between each awful pause,
From the high vault an answer draws,
In varied tone prolong'd and high,
That mocks the organ's melody.

Lord of the Isles, cant. iv. st. 10.

In a note on this passage, the author says, 'it would be unpardonable to detain the reader upon a wonder so often described, and yet so incapable of being understood by description. This palace of Neptune is even grander upon a second than the first view. The stupendous columns which form the sides of the cave, the depth and strength of the tide which rolls its deep and heavy swell up to the extremity of the vault, the variety of the tints formed by white, crimson, and yellow stalactites, or petrifications, which occupy the vacancies between the bases of the broken pillars which form the roof, and intersect them with a rich, curious, and variegated chasing, occupying each interstice; the corresponding variety below water,

saltic columns arise; the tremendous noise of the swelling tide, mingling with the deep-toned echoes of the vault, are circumstances elsewhere unparalleled.'

Mackinnon's Cave and the Boat Cave, though inferior to that now described, are also magnificent caverns.

Staffa was first made known to the public by the interesting account of it given by Sir Joseph Banks, by whom it was visited in 1772. (Pennant's *Tour in Scotland*, ii. 300, ed. 1790.) It is now, during summer, frequently visited by steamers; but it is uninhabited.

STAFFORD, a central co. of England, having N. Cheshire, E. Derby and Warwick, S. Worcester, and W. Salop. Area, 728,468 acres. Aspect various. The N. part, or that portion of the co. lying to the N. of a line drawn from Uttoxeter, on the confines of Derbyshire, to Newcastle-under-Lyne, consists principally of moorlands. The hills, in some parts of this district, rise to an elevation of about 1,000 ft. above the level of the sea; sometimes consisting of vast heaps of gravel, and sometimes of huge cliffs, having immense masses of rock scattered round their bases. With the exception of some beautiful valleys, the whole of this district is sterile, cold, and dreary. The soil in many places is peat; but in some parts, particularly between the rivers Dove and Churnet, it is of a superior quality and produces good herbage. The middle and S. parts of the co. are agreeably diversified with hills, level lands in pasture and corn, plantations, and gentlemen's seats; but, in its extreme S. angle, the iron-works are its most prominent feature. The valley of the Trent is particularly fertile and beautiful. Cannock Heath, immediately to the W. of Rugeley, is the largest of the remaining tracts of waste land in the co. The cultivated land, including parks, is estimated at 600,000 acres, of which 100,000 may be meadow and pasture, and 500,000 arable. The latter is distributed as follows: viz. 200,000 acres of clay loam, or more friable mixed loam; 200,000 acres of gravelly or sandy loam, or other mixed, including calcareous soils; and the remainder, or 100,000 acres, of light sandy, gravelly, or other soils. The air is sharp and cold; and, in the W. parts particularly, there is a great deal of rain. Stafford is more a mining and manufacturing than an agricultural co.; but husbandry, though not so far advanced as it might be, is, of late, very considerably improved. Wheat, oats, beans, and barley are the principal crops. The usual rotation on the clay land is, 1. fallow; 2. wheat; 3. beans; 4. seeds; 5. oats. Various important improvements have been effected within the last 50 years, particularly on the estates of some great landowners, such as the Duke of Sutherland, who has expended large sums on drainage, on the building of new, commodious, and excellent farm-houses, and on other substantial improvements. The cattle of Staffordshire are principally of the long-horned breed; but, within no very distant period, they have been extensively crossed with short-horns; and the stocks of some of the principal breeders consist, at present, entirely of the latter. Dairy husbandry is extensively practised; cheese is the principal product, and it is but little inferior to that of Cheshire and Derby. The sheep stock is estimated at about 187,000, and the produce of wool at about 3,500 packs. Property in estates varying from 10,000*l.* a year down to 40*s.*; farms of all sizes, from 25 to 500 acres, but the smaller class is decreasing; leases frequently

particularly famous for its potteries and iron foundries. The chief seat of the former is in a district denominated 'The Potteries,' between Newcastle-under-Lyne and Norton-on-the-Moors, in which there are several very considerable towns and villages, mostly supported by the business. The neighbourhood affords abundance of fine clay and coal; but the finest clays are principally brought from Purbeck, in Dorsetshire, soapstone from Cornwall, and flints from the chalk pits near Gravesend, and from Wales and Ireland. The iron-works are principally situated in the S. angle of the co., in the vicinity of Walsall, Wednesbury, and Bilston. The manufacture of locks, nails, edge tools, bridles, spurs, and an infinity of other hardware articles, is prosecuted upon a very large scale at Wolverhampton, Bilston, and Walsall, and their vicinity. Soho, the famous establishment of Messrs. Boulton and Watt, where there is the greatest manufactory of steam-engines in the world, is situated within this co., on its extreme southern border. Glass is also made on the confines of Worcestershire. Hats, shoes, and boots are prepared at Stafford for exportation, as well as home consumption; and cotton-mills have been erected at Rochester and other places. Principal rivers, Trent, Dove, and Stour. The Trent and Mersey canal passes through the county, dividing it into two pretty equal parts; and it is intersected by an immense number of other canals, and more recently by various railways. It is divided into 5 hundreds, excl. of the city of Lichfield and the bors. of Stafford and Newcastle-under-Lyne, and 145 parishes. It returns 17 mems. to the H. of C., viz. 4 for the co.; 2 each for the city of Lichfield and the bors. of Newcastle-under-Lyne, Stafford, Tamworth, Wolverhampton, and Stoke-upon-Trent; and 1 for Walsall. Registered electors for the co. 21,545 in 1865, being 10,704 for the northern and 10,841 for the southern division. At the census of 1861, the co. had 147,105 inhab. houses, and 746,943 inhabitants; while, in 1841, Stafford had 97,777 inhab. houses, and 510,504 inhabs.

STAFFORD, a parl. and mun. bor. and market town of England, hund. Pirehill, in the above co., of which it is the cap., on the Sow, crossed here by a neat stone bridge, 28 m. NNW. Birmingham, and 133½ m. NW. London by London and North Western railway. Pop. 12,532 in 1861. The town is generally well built, the houses, several of which are handsome, being of brick and slate; and is paved and lighted with gas, under the provisions of a local act. A good supply of water is procured from several public pumps. The principal street runs NNW. from the bridge; and near its centre is the market-square, in which is the county-hall, a large modern building of stone, comprising several handsome apartments, besides an assembly room, a grand jury room, courts for the assizes and sessions, mayor's office, and other apartments. The county gaol is also a modern structure of extensive dimensions, and well arranged, both for the health and classification of prisoners, 200 of whom may be accommodated in separate cells. Stafford has two pars., St. Mary's and St. Chad's, now consolidated. St. Mary's is a large cruciform structure, in the early English style, from the centre of which rises a lofty octagonal tower: it has been restored in recent years at an expenditure of 10,000*l.* More modern edifices are Christchurch and St. Paul's; the latter is a good specimen of Gothic architecture. St. Chad's is a Norman structure, with more recent English additions.

worship, mostly with attached Sunday schools. The grammar school, an ancient foundation, was much enlarged by Edward VI.: the income from the endowment exceeds 370*l.* a year, two-thirds of which are paid to the head-master, and the remainder to the usher. It is open to all boys of the town; but the number of those on the foundation seldom exceeds twenty. The appointment of masters is vested in the corporation, subject to the approval of the bishop of Lichfield and Coventry. A diocesan national school is established here, and a Lancastrian school is supported by subscription. The institution for the relief of the orphans and widows of the clergy within the archdeaconry of Stafford is not only liberally supported by subscription, but has an income of 2,400*l.* a year, arising from funded property. Superannuated or infirm clergymen, also, are eligible for the benefits of this charity. The county infirmary, in the Foregate, has accommodation for 120 in-patients, and relieves a much larger number of patients at their own dwellings. It has a respectable medical staff. The county lunatic asylum, established in 1818, receives patients not only from the co. itself, but from the kingdom generally, though the former are received on lower terms than the others. This establishment is supported both by subscriptions and funded property: it is admirably conducted, and may rank among the principal asylums in the kingdom. The buildings comprise accommodation for 170 patients, and the gardens cover an area of several acres. There is an almshouse; but it is poorly endowed, and fast falling to decay. The manufacture of shoes is the principal employment of the inhabitants, and several manufacturers employ 150 hands: a good workman can earn from 20*s.* to 30*s.* a week, and there is a steady demand for labour. The tanning of leather is no longer carried on to any extent. Stafford is noted, in common with the neighbourhood, for the excellent quality of its ale.

Stafford was incorporated in the reign of John. It is divided, under the Municipal Reform Act, into two wards, its officers being a mayor, five aldermen, and eighteen councillors. The assizes and quarter sessions for the co. are held here. The bor. has returned two mems. to the H. of C. since the 28th Edward I., the right of election down to the Reform Act being in the resident freemen. The Boundary Act included a part of the parish of Castlechurch with the old borough. Registered electors, 1,495 in 1865. The custom of borough-English, by which lands descend to the younger son to the exclusion of his elder brothers, prevails within the town and liberties. Stafford is, also, the election town for the N. division of the co., as well as the principal seat of a poor-law union, comprising 21 pars. Markets on Saturday: fairs, April 5, May 14, June 25, Oct. 3, and Dec. 5, chiefly for horses and cattle. There is also a fortnightly cattle market.

STAMFORD, a parl. and mun. bor. and market town of England. SW. extremity co. Lincoln, on the Welland (crossed here by a stone bridge of five arches), 38 m. S. Lincoln, 80 m. N. by W. London by road, and 92 m. by Great Northern railway. Pop. 8,047 in 1861. The town is well-built, principally of stone, partly paved, well lighted with gas, and supplied with water from Wothorpe, about 1 m. distant; but the streets are irregularly laid out. The town-hall, rebuilt in 1776, a large and fine edifice, comprises a sessions-room, gaol, and muniment-office. The town has, also, a small, well-arranged theatre, and assembly-rooms. The other public buildings are the churches, of which only six remain out of fourteen. St. Mary's, considered the mother-church, was built

about the end of the thirteenth century, and is chiefly in the later English style, having a very fine tower and spire. All Saints is a handsome building, with a tower and octangular crocketed spire. The livings are all in the gift of the Marquis of Exeter. The Wesleyan Methodists, Independents, and Roman Catholics have places of worship, and there are numerous Sunday schools. The grammar school, founded in 1548, is well endowed, the net income of the master being nearly 700*l.* a year; but the school has for many years past been of little service to the inhabs. A blue-coat school affords clothing and instruction to about 150 boys: the petty school was founded in 1604, and a girls' national school was established in 1815. The endowed charities are numerous and valuable: several hospitals, or almshouses, have been founded at different times; besides which, there are several considerable bequests for the relief of the aged poor. A handsome infirmary has been built near the town, and furnishes accommodation for about thirty in-patients and 150 out-patients. There are no manufactures; but a considerable business is carried on in malting, and in a retail trade with the neighbourhood. The Welland is navigable for barges from hence to the sea. In the town are excellent hot and cold baths; and races are held in March and July, on Wittering Heath, in the vicinity. It has two weekly newspapers and three banks. Markets on Monday and Friday, the latter being for corn. Fairs: Midlent Monday, Monday before May 12, and Nov. 8.

Stamford (an. *Stean-forde*, meaning the paved ford) was incorporated in the reign of Edward IV. It is divided, under the Mun. Reform Act, into 2 wards, its officers being a mayor and 5 aldermen, with 18 councillors. Quarter and petty sessions are held under a recorder, and there is a county court. The custom of borough-English, by which landed property descends to the youngest son, to the exclusion of his elder brothers, prevails here; but there is only one copyhold house in the town. Stamford has, with some intermission, sent 2 mems. to the H. of C. since the reign of Edward I., the right of election down to the Reform Act being in the resident freemen and inhabs. paying scot and lot. The electoral limits were enlarged by the Boundary Act, so as to include a portion of Stamford-baron S. of the river. Reg. electors, 555 in 1865. Stamford is the principal town of a poor law union comprising 37 pars. The remains of conventual buildings, which are found abundantly in different parts of the town, show that it was formerly of some importance as an ecclesiastical settlement; and in the reign of Edward III. it became, for a brief period, the seat of a university, which, however, soon fell to decay.

Within a short distance of the town, on its E. side, is Burghley House, the seat of the Marquis of Exeter, one of the finest Elizabethan residences in the kingdom. John Clare, the poet, who was born in this neighbourhood, worked for a time as gardener in the park attached to Burghley House. (See Life of John Clare, London, 1865.)

STARGARD, a town of Prussia, prov. Pomerania, on the Ihna, in a very fertile country, 21 m. E. by S. Stettin, on the railway from Stettin to Posen. Pop. 16,077 in 1861. The cupola of St. Mary's church is supposed to be one of the most elevated in Germany. It has a college or gymnasium, founded by a private citizen in 1681, and a school of arts, with distilleries and different branches of manufacture.

STETTIN, an important town and river port of Prussia, cap. Pomerania, and of a reg. of the same name, on the left bank of the Oder, 36 m. above where it unites with the Baltic, on the railway

from Berlin to Kolberg. Pop. 64,431 in 1861, exclusive of garrison of 5,944 men. The town communicates by a bridge with a suburb on the right side of the river, and is very strongly fortified. It is well built, and is the most ancient as well as the principal town of Pomerania. Principal edifices, the royal castle, governor's house, mint, exchange, arsenal, and theatre. It has several churches, of which the principal, St. Mary's, was founded in 1263. The warehouses belonging to the salt company are the most extensive of any in Prussia. The royal square is ornamented by a statue of Frederick the Great. It is the residence of the provincial authorities, and has a court of appeal for the circle, a gymnasium, founded in 1543, an observatory, a seminary for the training of schoolmasters, a public library, and various other literary institutions. Ship and boat building, and the forging of anchors, are extensively carried on; there are also distilleries, with a considerable variety of manufactures. Stettin is the seat of an extensive and growing commerce, and the principal port of importation in Prussia. The town owes this distinction mainly to her situation. The Oder, which flows through the centre of the Prussian dominions, is navigable for barges as far as Ratibor, near the extreme southern boundary of Prussian Silesia, and is united by means of canals with the Vistula, Elbe, and the Spree. Stettin is, consequently, the principal emporium of some very extensive and flourishing countries; and is not only the port of Frankfort-on-the-Oder, Breslaw, and other towns, but also of Berlin.

Vessels of considerable burden, or those drawing above seven or eight ft. water, load and unload by means of lighters at the mouth of the river at Swinemünde, the outport of Stettin, on the E. coast of the isle of Usedom. (See SWINEMÜNDE.) There is a great wool fair in the month of June each year. The principal articles of export consist of linens, corn, wool, timber and staves, zinc, manganese, bones, oil-cake, and bottles. The imports consist of sugar, coffee, and other colonial products, wine, indigo, and other dye-stuffs, cotton stuffs, yarn, and raw cotton, herrings, hardware, oil, tallow, coal, and salt. Stettin has considerable manufactures of woollen stuffs, hosiery, leather, sail-cloth, and tobacco, and the most extensive sugar refinery in Prussia.

STEUBENVILLE, a town of the U. States, in Ohio, cap. Jefferson, co. on the Ohio, 45 m. W. by S. Pittsburg. Pop. 6,140 in 1860. It is a flourishing, well-built town, having woollen, cotton, steam-engine, and other machine factories; saw, flour, and paper mills; and printing establishments, the machinery of which is impelled by steam. It presents every probability of a rapid increase, the country around being rich and populous.

STEYNING, a market town and par. of England, co. Sussex, rape Bramber, hund. Steyning; area of par. 3,290 acres. Pop. 1,620 in 1861. The town, on the Adur, 5 m. from the English Channel, and 11½ m. S. Horsham, consists of four indifferently built streets. It has a very curious Norman church, with a great variety of excellent and very elaborate detail. Brotherhood Hall, an old edifice of the time probably of Henry VIII., is appropriated to a free school, founded in 1614, for the classical education of 10 boys. This town sent 2 mems. to the H. of C. from the reign of Edward II. to the passing of the Reform Act, by which it was disfranchised. The franchise was nominally vested in the inhab. householders pay-

is a polling place for the W. division of the county, and has petty sessions.

STIRLING, a central and marit. co. of Scotland, having N. the co. Perth, E. the Frith of Forth and Linlithgow, S. the latter, Lanark and Dumbarton, and W. the latter and Loch Lomond. Area, 321,280 acres, including 8,320 acres water. Surface extremely diversified, consisting partly of high mountains, partly of extensive moors, and partly of very rich alluvial carse lands. Ben Lomond, the most celebrated and best known of the Highland mountains, in the NW. part of the county, immediately above Loch Lomond, has an altitude of 3,191 ft. The Fintry, Campsie, and Lennox hills lie in the middle and S. parts of the co.; the surface, from Denny NW. to Loch Lomond, is in most places very bleak and sterile. The low alluvial or carse lands, which are extremely productive, lie on both sides the Forth, but principally on its S. bank, extending from Falkirk to above Stirling. They are supposed to comprise in all, from 35,000 to 45,000 acres. They consist principally of a bluish clay, intermixed with sand. In the W. parishes clay soil predominates; and, as it rests on a bottom of hard ferruginous clay, it is cold and wet. In some places along the rivers the soil is light and gravelly. In the high moors it is mossy, and in the lower grounds there are considerable peat bogs. Several large estates, but property a good deal divided. Farms in the lower districts vary from 20 to 300 acres; but, in the hilly and mountainous districts, they are much larger. Agriculture very various, but generally well suited to the situation and climate. Drainage has recently been practised on a very extensive scale. In the carse, wheat, beans, barley, and clover, but particularly the first two, are the principal crops. On the lighter lands turnips are largely cultivated, oats being the prevailing crop on all the poorer high lands. Potatoes generally cultivated. Sheep mostly of the black-faced Linton breed, but Cheviots have been largely introduced. Besides the cattle bred in the co., which are not remarkable for their goodness, great numbers of Highland cattle are annually purchased for feeding at the Falkirk *trysts*. These are the greatest fairs, or markets for cattle, of any in Scotland. They are held on the second Tuesday of Aug., Sept., and Oct.; the last being the largest. Cattle in all sorts of condition are brought to them from all parts of Scotland, but principally from the north; as are also sheep and horses. At an average, it is supposed that about 80,000 cattle, 50,000 sheep, and 5,000 horses, are annually disposed of at these *trysts*.

Stirlingshire is said to have about 13,000 acres of natural wood, and above 10,000 acres of plantations. The E. parts of the co. have a finely diversified appearance, and the view from Stirling Castle is perhaps unequalled by any other in Britain. (See next art.) Coal abundant, and there are large supplies of iron-stone. Extensive works have long been established at Carron, for the smelting of iron, and the manufacture of all sorts of cast-iron goods, whether for civil or warlike purposes. (See CARRON.) Exclusive of distilleries, some branches of manufacture, on a pretty considerable scale, are carried on at St. Ninian's, Stirling, Falkirk, and other towns. Principal river, Forth; to which are tributary the Carron, Bannockburn, and other small streams. Stirling has 25 pars., and returns 1 mem. to the H. of C. Registered electors for the co. 1,943 in 1865. The bor. of Stirling unites with the bors. of Inverkeithing, Dunfermline, Queensferry, and Culross; and the bor. of Falkirk with

of 1861, the co. had 12,271 inhab. houses, and 91,926 inhabitants; while, in 1841, Stirling had 15,813 inhab. houses, and 82,057 inhabitants.

STIRLING, a royal and parl. bor., river port, market town, and fortress of Scotland, cap. of the above co., on the Forth, 30 m. WNW. Edinburgh, and 22 m. NE. Glasgow, on the Scottish Central railway. Pop. of parl. bor., which includes the suburb of St. Ninian's, 13,707 in 1861. The situation of Stirling is magnificent in the extreme. It is built on the SE. declivity of a hill, which, rising from one of the most fertile plains in Scotland, terminates on the N. and W., immediately over the river, in an abrupt basaltic rock, about 300 ft. in height, surmounted by a fine old castle. It consequently bears a striking resemblance to Edinburgh; but its situation is finer, more central, and in all respects more suitable for the capital of Scotland. The view from the castle, if not unrivalled, is, at all events, unsurpassed by any other in the empire. It combines all that can give variety, interest, and grandeur to a prospect. To the E. it extends over the richest valley in Scotland, as far as Edinburgh, commanding all the windings of the Forth; to the W. is the fertile strath of Menteith, the view in this direction being bounded by Ben Lomond; on the N. it is bounded by the range of the Ochill hills; and immediately to the S. is the field of Bannockburn, the Marathon of Bruce and of Scotland. The principal street, which extends from the castle down the ridge of the hill, with narrow cross streets branching from it down the declivity on each side, is open and spacious; and the houses, though many of them bear marks of antiquity, are generally lofty and comfortable. The principal building is the castle. A fortress is said to have been erected on its site by the Romans, and there can be no doubt of its great antiquity. Its inaccessible situation in the centre of the kingdom, at the point where the Forth first becomes fordable, renders it, as it were, the key of the Lowlands on the one hand, and of the Highlands on the other.

Stirling early became a place of great importance, and it was for a lengthened period a favourite royal residence, and the seat of the legislature. Previously to the invention of artillery, the castle was a place of great strength; but, notwithstanding the additions made to the works in more modern times, it could not oppose any effectual resistance to an army properly supplied with artillery. It is a quadrangular building, with an open area in the centre, and, besides other structures, includes the old royal palace, principally built by James V., and the parliament house; but these venerable structures have been converted into barracks. It is stipulated in the articles of union with England, that Stirling Castle shall be always garrisoned, and kept in repair.

Among the public buildings in the town are the town-house, gaol, Cowan's hospital, founded in 1639, and richly endowed; the atheneum, with a spire 120 ft. in height, and a hall for the circuit and sheriff courts. The old church, a venerable Gothic edifice, a portion of which formed part of the Franciscan monastery, founded in 1494, has long been divided into two places of worship. James VI., when a child, was crowned in it, on the 29th of July, 1567, the coronation sermon being preached by the famous reformer, John Knox. Three churches belong to the Establishment; 2 to the Free Church, 2 to the United Presbyterians, and 1 each to the Reformed Presbyterians, Independents, Episcopalians, Wesleyan Methodists, and Rom. Caths. Some of the houses formerly occu-

dissent prevails in Stirling, perhaps to a greater extent than in any other town of Scotland. Ebenezer Erskine, one of the ministers of Stirling, was (along with his brother Ralph, one of the ministers of Dunfermline) a founder of the Secession or Associate Synod, about 1740. The town has been long eminent for its schools, particularly those for classical literature. It has also a mechanics' institute and several public libraries. Exclusive of Cowan's hospital, noticed above, founded by a citizen of that name, Stirling has two other well-endowed hospitals, exclusive of the interest of 4,000*l.* left in mortmain for behalf of the poor.

The chief manufacture is that of tartans, tartan shawls, carpets, and yarns, which is carried on to a large extent; and the dyeing of yarns, home-made cloths, and silks is also carried on. Cotton goods are manufactured, though to no great extent, with ropes, malt, leather, soap, and candles. The town has extensive markets, the corn exchange being one of the finest in Scotland: it has also a considerable coasting and retail trade. About 100 vessels are engaged in the trade on the Forth up to Stirling, and steam-packets ply daily between the town and Granton Pier, near Edinburgh.

Stirling received its first charter from Alexander I. in 1120; it is now governed by a provost, 3 bailies, and 18 councillors. Corporation revenue, about 3,000*l.* a year. The bor. unites with Dunfermline, Culross, Inverkeithing, and S. Queensferry, in sending 1 mem. to the H. of C. Registered electors, 636 in 1865.

Stirling and its immediate vicinity has been the scene of some of the most memorable events in Scotch history. In 1297 Wallace defeated a formidable English army close to the town; and the victory of Bruce at Bannockburn, in 1314, secured the independence of Scotland. James II. was born in the castle; and there, in 1452, he murdered the Earl Douglas, whom he had inveigled thither by the grant of a safe conduct, and the assurances of friendship. Stirling was also the birthplace of James V., and his favourite residence. Here also James VI. resided with his tutor, the celebrated George Buchanan (*Scotorum sui sæculi facile princeps*), till he was 13 years of age; and here, as already stated, he was crowned in 1567. The abbey of Cambuskenneth, one of the richest and most magnificent in Scotland, stood on the banks of the Forth, a short way from Stirling. Its ruins are still very considerable.

STOCKBRIDGE, a market town and par. of England, co. Hants, hund. Thorngate, on the Test, a tributary of the Anton, and on the Andover canal, 8 m. WNW. Winchester. Area of par. 1,220 acres. Pop. 935 in 1861. The town has a town-hall, a neat edifice, erected in 1810 by the marquis of Westminster. From the first of Elizabeth down to the passing of the Reform Act, by which it was disfranchised, this petty place, or rather its proprietors, enjoyed the privilege of sending 2 mems. to the H. of C.

STOCKHOLM, a celebrated city of the N. of Europe, the cap. of Sweden, at the junction of the Lake Mælar with the Baltic, 440 m. W. by S. Petersburg. Pop. 124,691 in 1863. Stockholm is very strikingly situated, partly on a number of islands, at the entrance of the lake, and partly on the mainland, upon both sides of the strait, covering altogether an area of about $4\frac{1}{2}$ sq. m. The view of the city, when approached from the Baltic, commands the palace, the principal bridge, and other prominent objects, and is extremely grand and imposing. On the islands, and more particularly on those called *Stockholm* (isl. of the Castle), *Riddarholmen* (Knight's isl.) and *Holmen* (the island),

they are united by 13 short bridges of stone, and others of wood, stand the king's palace, the great cathedral, the bank, the hall of the diet, and most of the more conspicuous ornaments of the city; but the larger portion of the private houses are built on the mainland, which on the N. side, called the Nörmalm, or N. suburb, slopes gradually backwards from the shore; but on the S. side, or the Södermalm, rises in bold abrupt cliffs, where the white houses nestle beautifully among shading trees. The streets on the mainland are in general regular, though not very wide; but many of those on the islands are narrow and crooked. On the three principal islands most of the houses are of stone, but in the N. and S. suburbs the greater part are of stuccoed brick, painted white, yellow, or faint blue. In the remote suburbs wood is the only material employed. In most of the houses the stairs and lobbies are of a dark blue stone. Most of the great thoroughfares are well paved, but almost wholly destitute of footpaths. In all parts of the city it has been necessary, from the nature of the ground, to build upon piles. Except some churches, few buildings of importance are situated in the N. suburb. It contains, however, the two principal squares of the city, one of which, the 'King's garden,' bordered with large shady trees, has a good statue of Charles XIII.; while the other, called the square of Gustavus Adolphus (one side of which is formed by the opera house, in which Gustavus III. was assassinated in 1792), has a well-executed statue of the hero whose name it bears. From this square a handsome bridge opens a communication with the principal island and the royal palace, and forms the most fashionable lounge in Stockholm. The line of this bridge crosses Helge And's island, cutting off a small portion of the latter, which, being fitted up as a garden, is the resort of the best society of the capital. The Södermalm, or S. suburb, is connected with the city by a bridge, underneath which are sluices for drawing off the waters of the lake. It has 2 fine churches, and a statue of Charles XII. on the military parade.

Though Stockholm has numerous statues, it has but few public edifices of an ornamental character. The palace, however, an immense quadrangular edifice, begun during the reign of Charles XII., has a majestic appearance from whatever point it may be viewed. Its N. and S. faces being prolonged eastward towards the sea, inclose between them a flower-garden. The lower part is of polished granite; the upper, of brick covered with cement. It contains a museum of antiquities and sculpture, with several good works by Swedish artists; a picture-gallery, in which are a few fine paintings by Raphael, Teniers, Paul Potter, and Ostade, some other superior paintings in the queen's apartment; the royal library, with 60,000 vols., in which a copy of every book printed in Sweden must be deposited; the mint, the repository of national archives, and a chapel, very splendidly fitted up. Broad and massive quays, which surround the palace on its E. and N. sides towards the principal harbour, effectually prevent the noise and confusion of the shipping, which at one point is very dense, from reaching the royal apartments. On one of the quays, within view of the palace windows, is a statue of Gustavus III.; and at the other end of the avenue leading from this point, a small but handsome obelisk has been raised to his memory. The king's stables, on an adjacent island, form a very extensive quadrangular building, having accommodation for 120 horses. The churches, externally, are in general devoid of ar-

kings of Sweden are crowned, is imposing from its mass, and has some paintings and sculptures of merit, and a remarkable piece of carving, representing St. George and the Dragon. But the most interesting church is the Riddarholm, in which the kings of Sweden are buried, and in which are preserved many national military trophies. The spire of this church, destroyed by lightning in 1835, has since been replaced. There are also German, Finnish, and Scotch Presbyterian churches. The Riddarhuset, or Hall of the Diet, erected in the time of Queen Christina, is in a peculiar style of architecture, and has its roof ornamented with statues. The room in which the diet assembles is of moderate size. Its walls are hung with the armorial bearings of the principal Swedish families, and its seats are subdivided into 4 distinct compartments, without, however, any difference as to the mode of their sittings. The president's chair, a fine specimen of workmanship, is at the upper end of the hall; the nobles' seats being on the right, those of the clergy on the left, and those of the town and country deputies in front. The town-house is an old-fashioned building, with 4 wings. The military hospital, on one of the more remote islands, is among the best establishments of its kind in Europe. The hospital, founded by Gustavus III., though spacious, is not so well conducted. There are several well-ordered prisons, and public charities of various descriptions, including a foundling hospital, to which many children are carried.

There are several public parks in the neighbourhood of Stockholm. The most celebrated is the *Djurgården* (deer garden), to the E. of the city. From its great extent and romantic character, it is, probably, the finest public park in Europe. The rugged peninsula, of which it occupies the greater part, is so varied with rocks and trees, that art, which must do every thing in the parks of other great capitals, has here only not to injure nature. The margin of the peninsula is covered with old-fashioned eating-houses and places of entertainment. Within this confused circle runs the beautiful carriage drive, lined with modern villas of classical design, Swiss cottages, and Italian verandas. Among these are placed coffee-houses, equestrian theatres, and dancing-rooms, while the space between them and the road is occupied with flower-plots and shrubberies, through which rustic seats are scattered. In this park is the bust of Bellman, a lyric poet of great excellence, in the time of Gustavus III. The anniversary of this poet's birth is kept with great rejoicings by all classes, but especially the Bacchanalian Club, whose members, headed sometimes by the king himself, come out in festive array, to parade round this bust, which is very appropriately decorated with grapes and vine-leaves. Not far from this popular monument is *Rosendahl*, a favourite summer residence of the king. This, like all the other houses in the park, is a portable wooden edifice, which piece of structure is very common all round Stockholm. Drottningholm and Haga, at different distances from the capital, are other royal summer residences. Near Rosendahl Palace is an immense porphyry vase, 9 ft. in height and 12 ft. in diameter, which cost about 10,000*l*. Opposite Haga is the new burial-ground, a spacious cemetery, in which are some fine monuments. Carlberg and Ulriksdale were formerly royal palaces; but the former has been converted into a military academy, and the latter into a military hospital.

Stockholm is the principal emporium of Sweden. The entrance to the harbour from the Baltic is in-

lying close to the quays. The principal exports are iron, timber, and deals. (See SWEDEN.) Stockholm is also the chief manufacturing town of the kingdom, having woollen cloth, cotton, linen, silk, glass, and earthenware factories, iron-works, including factories for the construction of steam engines. The more important branches of commerce are generally carried on by natives of the city; settlers from the provinces being comparatively few, except such as are engaged in the more laborious kinds of occupations. During the summer nearly all persons in tolerable circumstances spend part of their time in the environs. At all the public places visitors are waited on by women; and a stranger is surprised to see many employments entrusted to men in other countries here undertaken by females. The ferry-boats, for instance, are almost all rowed by Dalecarlian females, in their peculiar native costume.

Stockholm has several distinguished academies, including the academy of sciences, established about 1740, with an admirable museum of zoology; the Swedish academy, founded by Gustavus III.; the academy of painting and sculpture, which has produced Sergel, Fogelberg, and Bysstrom; and that of literature, a college of medicine, schools of navigation and drawing, with societies of agriculture, commerce, and philosophy. There are also several clubs and reading-rooms, on the same plan as those of London.

Stockholm appears to have been founded by Birger, regent of Sweden, in the thirteenth century. It became the residence of the Swedish sovereign soon after Birger's death, but was not recognised as the capital till the seventeenth century, previously to which, Upsala had been the seat of the court.

STOCKPORT, a parl. bor. and manufacturing town of England, co. Chester, on the borders of Lancashire, 5 m. SE. Manchester, 10 m. N. Macclesfield, and 183 m. NW. London, by London and North Western railway. Pop. of bor. 54,681 in 1861. The parl. and mun. bor. comprises the township of Stockport, with part of those of Brinnington and Heaton Norris, and the hamlets of Brinksway and Edgeley, in the adjacent par. of Cheshire. The town-proper, which is supposed to occupy the site of a Roman military station, is built on an abrupt hill beside the Mersey, which, sweeping round its E. and N. boundary, is here joined by the Tame. From the bank of the river the houses rise in successive tiers round the sides of the hill, from the base to the summit, some having apartments excavated in the sandstone rock; and the numerous extensive factories elevated above each other, and spreading over the town, give it, especially when lighted up at night, a striking appearance. The most ancient part of the town surrounds the church and market-place on the top of the hill, whence various streets diverge in different directions. The principal street, called the Underbank, follows the direction of the old Roman road S. to Buxton. Three bridges across the Mersey connect the town-proper with its suburbs of Portwood and Heaton Norris. Portwood, in the township of Brinnington, is large, populous, and of considerable manufacturing and commercial importance. To the W. of Stockport numerous streets, houses, and factories cover the greater part of the hamlets of Brinksway and Edgeley. Heaton Norris, which is situated in Lancashire, communicates with the better part of Stockport, by a new line of road, and a noble bridge of eleven arches across the valley and the river. The arch over the river, built of hard white

Cheshire side are carried across several streets, leaving thoroughfares underneath.

Stockport is well paved and lighted with gas, and there is an ample supply of water. The parish church, the chief public edifice, appears to have been erected in the 14th century, but has been much patched up in later times. The chancel had a fine decorated E. window, but this has been removed. At the W. end of the church is a lofty square tower, crowned with a pierced parapet and pinnacles, and in the interior are several ancient monuments. The living, a rectory of the clear annual value of 1,882*l.*, is in the gift of Lady Vernon. There are fourteen other churches in the town, among them St. Thomas's, an elegant building in the Grecian style, erected at an expense of 14,555*l.*, and numerous places of worship for Independents, Methodists, Friends, Unitarians, R. Catholics, &c. A free grammar school founded in 1487, is under the government of the Goldsmiths' Company of London. It gives gratis instruction to 150 boys, sons of inhabs. of Stockport, in the ordinary branches of education. Their nomination rests with three visitors appointed by the Goldsmiths' Court of Assistants. Some handsome buildings for this foundation have been erected, at a cost of about 4,000*l.* A large national school was established at Stockport in 1805, and school-houses were built, at an expense of 10,000*l.* A great number of children of both sexes are educated here, and without the town this establishment has several branch schools. Most of the religious denominations have their own Sunday schools. There are almshouses for six poor men, founded in 1683, and various other charities for the relief of the poor. A public park, called Vernon Park, of 26 acres, with statues and fountains, was opened in 1858.

Formerly, the winding and throwing of silk were the principal branches of industry in Stockport; but these have declined in favour of the cotton manufacture, which now occupies the greater part of the pop. Many large factories have been constructed of late years. There are also several silk-mills in full activity, the rivers affording an ample supply of water. The importance of Stockport as a manufacturing town is, however, chiefly owing to its abundant supply of coal, obtained from Poynton and the districts on the line of the Manchester and Ashton canal, with which it communicates by a branch canal. The weaving of calico has spread itself over all the neighbouring villages, and calico-printing is carried on to a great extent, there being many large dye-houses in the vicinity. Fine woollen cloths and hats are also manufactured, and the construction of machinery is an important department. The mun. bor. is divided, under the Municipal Reform Act, into 6 wards, and is governed by 14 aldermen and 42 councillors. The ancient charter of incorporation is of uncertain date. The office of mayor was, till a late period, mostly honorary; the town now has a commission of the peace. Corp. revenue, 15,329*l.* in 1860. The Reform Act conferred on this bor., for the first time, the privilege of returning 2 mems. to the H. of C. Registered electors, 1,347 in 1865. The most interesting object in the vicinity of Stockport is the stupendous viaduct of the Manchester and Birmingham railway over the Mersey, erected at a cost of 100,000*l.*

This town was a military post of some consequence previously to the Conquest, but as it is not mentioned in Domesday Book, it had probably been destroyed at that epoch. No remains

then taken by Prince Rupert, but finally retaken by the parliamentary troops, who retained it till the termination of the contest.

STOCKTON-ON-TEES, a town, sea-port, bor., and par. of England, being, next to Newcastle, Sunderland, and Hartlepool, the principal port in the kingdom for the shipment of coal, co. Durham, ward Stockton, on the Tees, near its mouth; $17\frac{1}{2}$ m. SE. Durham, and 238 m. N. London by Great Northern railway. Pop. of munic. bor. 13,357, and of par. 13,761 in 1861. Area of parish, which comprises the townships of Stockton, Preston-on-Tees, and Hartburn, 4,190 acres. The town, one of the cleanest and handsomest in the N. of England, consists of a straight and wide main street, a mile in length, running from N. to S., in which are many good houses, built chiefly of brick, though a few are of stone, taken from the old castle. From this street, smaller ones branch off on the E. towards the river; while on the W. a great many new houses and streets have been recently built. In the NE. part of the town is a spacious square, lately enclosed and planted, in which are some good buildings. About the middle of the high street is the town-hall, a commodious square edifice, with court, assembly, and other public rooms, but partly occupied as an hotel and near it is a handsome Doric column, on the place formerly occupied by an open cross. Near the S. end of the town is a handsome stone bridge, with five elliptical arches, erected by subscription, between 1764 and 1769, at an expense of 8,000*l*. The tolls of the ferry over the Tees were previously the property of the bishop of Durham, to whom a considerable annuity was made payable by the shareholders, but the whole debt having been paid off, the bridge became toll free in 1820.

A little further S. the Tees is crossed by a suspension bridge, forming part of the Middleborough branch of the Darlington and Stockton railway. The Port Clarence railway terminates on the Tees, a little NE. of Stockton. The par. church is a neat brick edifice, with a tower 80 ft. in height at its W. end. The living, a vicarage, worth 247*l*. a year, is in the gift of the bishop of Durham. There are places of worship for Baptists, Friends, Independents, Methodists, Unitarians, and Rom. Cath., several having Sunday schools attached; a mechanics' institute and library, a subscription-library, and a neat theatre. A charity-school was founded here by subscription in 1721, and a school for girls in 1803; and Stockton, with the adjacent parish of Norton, has a scholarship at Brasenose College, Oxon. Some almshouses, established in 1682, were rebuilt in 1816, and afford accommodation to 36 poor persons. It has a dispensary, a savings' bank, and many benefit societies.

The only manufacture is that of sail-cloth, for which there are some considerable establishments. New coal mines of large extent have been discovered in the neighbourhood, and the trade of the port has increased considerably of late years. Linen and worsted yarn and lead are also shipped in considerable quantities. There belonged to the port, on the 1st of Jan., 1864, eight sailing vessels under 50, and 39 above 50 tons, besides eleven steamers under 50, and four above 50 tons. The customs revenue amounted to 75,036*l*. in 1863. The port dues belong to the bishop of Durham, as lord of the manor, but are leased to the corporation at a nominal rent. Stockton is supposed to have been incorporated about the 13th century. The mun. borough is divided into two wards, and is governed by a mayor, five aldermen, and eighteen councillors. The bor. has, under the

Mun. Reform Act, a commission of the peace and a county court.

Stockton is of considerable antiquity, and was long the occasional residence of the bishops of Durham. Its castle was demolished by order of parliament in 1647.

STOKE-UPON-TRENT, a parl. bor., township, and par. of England, co. Stafford, hund. Pirehill, on the Trent, $2\frac{1}{2}$ m. E. Newcastle-under-Lyne, 15 m. N. by W. Stafford, and 144 m. NW. London by North Staffordshire and London and North Western railway. Pop. of par. 71,308, and of parl. bor. 101,207 in 1861. The parl. bor. comprises the most populous portion of the par., including the townships of Hanley, Shelton, Lane End, Fenton, with those of Burslem, Tunstall, and Ruston Grange, and the hamlet of Sneyd, in adjacent pars., being, in fact, co-extensive with the district termed the Potteries. It has an entire area of about 16,000 acres. Stoke-upon-Trent is lighted with gas, and well supplied with water. The old parish church being much decayed, a new and handsome church was erected in 1826, partly by subscription among the inhabs. In it has been placed a bust of the great founder of the earthenware manufactory, the celebrated Josiah Wedgwood, who died in 1795. There are several other churches, and chapels for various dissenting sects, and a large national school. The Trent and Mersey canal passes through Stoke par., and on its banks are numerous wharfs for shipping the earthenware, which is the great, and, indeed, almost the only product of this district. The towns now included within the district called the Potteries have almost all risen to importance since about 1760, when Wedgwood commenced his career. The Reform Act erected it and the districts specified above into a parl. bor., and gave it the privilege of sending two mems. to the H. of C. Registered electors, 2,858 in 1865.

The towns and villages comprised in the Potteries, or in the parl. bor. of Stoke-upon-Trent, are so near each other, that their limits are not easily defined, and to a stranger the entire district has the appearance of a large straggling town. A very large proportion of the pop. is engaged in, and a still greater is dependent for support on, the manufacture. With the exception of the gold used in gilding, most of the materials employed are worth very little; so that the value of the finished articles, as well as their exquisite beauty, and adaptation to every purpose of utility and ornament, is mainly ascribable to the skill and labour expended upon them. The wives and children of the workmen are usually employed; and though they work together in factories, yet, as they reside in separate cottages, the manufacture partakes largely of the domestic character. The noxious process of glazing, so injurious to the health of those employed, has been rendered nearly free from its deleterious effects by the substitution of boracic acid for lead, which was formerly wholly used, but now only in the proportion of eight per cent. The people employed in that branch were formerly not admissible into clubs, and were considered as degraded objects from the insalubrity of their employment; but they are now received into benefit societies. At present the Potteries are in a flourishing condition; and, speaking generally, the workpeople have a healthy comfortable appearance. The Sunday schools in the district are extremely well attended.

STONE, a market town and par. of England, co. Stafford, hund. Pirehill, on the Trent, and on the high road from London to Liverpool, 20 m. NW. Lichfield, on the London and North Western railway. Pop. of town 4,500, and of par. 7,000 in 1861.

1861. Area of par. 20,030 acres. The town consists principally of two streets crossing each other, and is pretty well built. The par. church is a modern structure, with a low square tower; the living, ■ perpetual curacy, worth 214*l.* a year, is in the gift of the crown. Here are chapels for Independents, Wesleyans, and Rom. Caths.; with a free school founded in 1558, and other charitable endowments. The Trent and Mersey canal passes through the town, the inhab. of which are principally engaged in the manufacture of shoes. Petty sessions are held here every fortnight.

Stone is supposed to owe its origin to a monastery founded in 670, afterwards made subservient to that of Kenilworth. Meaford, in Stone par., was the birthplace of Sir John Jervis, afterwards Earl St. Vincent, from his great victory over the Spanish fleet, off Cape St. Vincent, on the 14th Feb. 1797.

STONEHAVEN, a bor. of barony, sea-port, and market town of Scotland, co. Kincardine, of which it is the cap., on the German Ocean, at the point where two small rivers, the Carron and Cowie, fall into a small bay, flanked on both sides by lofty rocks, 14 m. S. by W. Aberdeen. Pop. 8,009 in 1861. The town consists of two parts: the old town, on the S. side of the Carron, is irregularly and badly built; but the new town, on the N. bank of the river, on the estate of Mr. Barclay of Ury, which has rapidly grown up, is comparatively well built and handsome: it consists of two parallel streets and cross streets, with a large square in the centre, and is far superior, in wealth and pop., to the other. The two towns are connected by a handsome stone bridge. The parish churches of Dunottar and Fetteresso are in the immediate vicinity of the town, which has also two chapels, belonging to the Episcopalians and Seceders. Exclusive of other seminaries, the town has a free school for the education of sixty poor children. The harbour, which is a natural basin, has been improved by the erection of piers, and affords a safe refuge for the smaller class of vessels. The inhab. engage to some extent in the herring and haddock fisheries.

Dunottar Castle, about 2 m. S. from the town, stands on a lofty peninsulated rock, projecting into the sea, being separated from the mainland by ■ vast chasm or natural fosse. The summit of the rock, which is mostly occupied by the ruins of the castle, comprises about 1½ acre. This castle was, for ■ lengthened period, the property and residence of the noble family of Keith, earls marischal. It was forfeited and dismantled after the rebellion of 1715, on the attainder of its noble proprietor. Owing to its position, it was formerly a place of considerable strength, and has been repeatedly besieged.

STONEHENGE, the name given to a gigantic ruin, consisting of vast stones, partly upright and partly fallen, on Salisbury Plain, co. Wilts, England, 2 m. W. Amesbury, and 7 m. N. Salisbury. Though its present appearance is that of a confused mass, justifying, in some degree, Camden's epithet of *insana substructio*, it is seen, on a little examination, that its original form, which may be easily traced, was circular. When perfect, it had consisted of two concentric circles of stones, with two inner groups of stones. The outer circle, the diameter of which is 100 feet, appears to have originally consisted of thirty upright stones, of which seventeen are still standing. Their average height is about 14 ft., and their sides 7 ft. by 3 ft. Each of these upright stones has tenons on its upper end, on which were placed horizontal stones or imposts, with mortices to correspond with the tenons; and these imposts being connected to-

gether, formed a continuous circular architrave all round the fabric. The inner circle, 8 ft. 3 in. within the outer circle, consists of smaller stones, more irregularly shaped than those in the outer circle, and without imposts. Only eight stones of this circle are now standing; but there are remains of twelve others on the ground. Within the inner circle are two groups of stones, having between them a large flat stone, called the *altar*. Some of these interior stones are of vast size, and have imposts similar to those of the outer circle. According to what appears to be the most accurate calculation, Stonehenge, when entire, must have comprised, in all, 129 or 130 stones. They consist mostly of a fine, white, compact sandstone, closely resembling, or rather identical with, the greyweathers and other detached masses of stone scattered over the surface of the downs in the vicinity of Avebury and Marlborough.

This gigantic structure is surrounded by what must originally have been a deep trench, about 30 ft. in breadth; and connected with it are an avenue and *cursus*. The former, a narrow road of raised earth, extends in a direct line from what is supposed to have been the grand entrance to the structure, a distance of 594 yards, when it divides into two branches, one leading to a row of barrows, and the other to the *cursus*, an artificially formed flat tract of ground. The latter, ¼ m. NE. from Stonehenge, is bounded by parallel banks and ditches, measuring 3,036 yards in length by 110 yards in breadth.

Such is a brief notice of this stupendous monument and of its principal appendages. Similar remains are found at Avebury, in the vicinity, and in various places in Britain, the Orkney Islands, &c. Conjecture has exhausted itself in vain, though frequently ingenious, attempts to explain the origin and use of this wonderful fabric and others of its class. The most common opinion is that it was raised by the ancient Britons for a Druidical temple. Elsewhere (see AVEBURY, I. 305) various reasons have been given for believing that the statement of its having been connected with the worship of the Druids is altogether unfounded, and that there is no evidence to show that the ancient Britons raised or could raise so extraordinary a structure. In truth, nothing is known of this and the other monuments of the same kind, beyond the fact of their existence. They belong to a period of which all records have irretrievably perished; and it is extremely improbable that the veil by which their origin and the purpose of their founders is now hid should ever be drawn aside. Inigo Jones, the learned Dr. Stukely, Dr. Smith, Sir R. C. Hoare, Gough, in his ed. of Camden, have given descriptions of Stonehenge.

STONEHOUSE. See PLYMOUTH.

STORNOWAY, a bor. of barony, sea-port, and market town of Scotland, on the E. side of the island of Lewis, one of the Hebrides (which see), on a fine bay, 36 m. W. by N. from the nearest point of Cromarty, on the mainland. Pop. of town, 2,587 in 1861. This, which is the most considerable town in the Western Islands, has grown up, within no very long period, from a paltry hamlet of about a dozen houses, in consequence of its favourable situation for carrying on the herring and cod and ling fisheries, especially the latter. Though not regularly built, the houses are substantial and slated, and there are some good shops. The harbour is formed by a pier; and the bay, which is spacious, and has deep water, is formed by two low headlands and an island. Stornoway Lodge, the occasional residence of Sir James Matheson, bart., proprietor of the island of Lewis, is in the immediate vicinity of the town. There is

a parish church, town house, and custom house; the gross revenue collected at the latter was 62*l.* in 1863. The means of education, which formerly were very deficient, have been increased materially of late years. Gaelic is the language generally spoken throughout the island: in Stornoway, however, it is giving way to English. Small packets, supported by government, ply weekly between Stornoway and Pollew, on the coast of Ross; and in summer Stornoway is visited by steamers from Glasgow.

With the exception of a small district immediately around Stornoway, the island of Lewis was, till recently, in a very backward state, and the inhabitants poor and wretched in the extreme; but a great change for the better has taken place since the island came into the possession of its present proprietor, who has expended large sums on its improvement.

STOURBRIDGE, a market town of England, co. Worcester, hund. Halfshire, par. Old Swinford, on the Stour, here crossed by a stone bridge, 18 m. NNE. Worcester, and 142 m. NW. London by Great Western railway. Pop. 8,166 in 1861. Though irregularly built, the houses are pretty good: it has a handsome market-house, a theatre, and a subscription library. The episcopal chapel, erected by subscription in 1742, is beyond the jurisdiction of the bishop: the living is a curacy, in the gift of the inhab. householders. There are places of worship for various sects of Dissenters, and a well-endowed free-school, founded by Edw. VI., in which Dr. Johnson received the rudiments of his education. Stourbridge has a national school, and a great number of benevolent and benefit associations. It is governed by a bailiff and town-clerk, and has petty sessions, and a 40s. court of requests. It has manufactures of glass and earthenware, and hardware: the iron trade of the town and neighbourhood is considerable. The town communicates, by a branch canal, with the Staffordshire and Worcestershire canal; by which great numbers of bricks are sent to the metropolis, and elsewhere. Markets on Fridays. Fairs, Jan. 8 and Mar. 29, for horses and cattle; Sept. 8, for cattle and sheep.

STOURPORT, a market town of England, co. Worcester, hund. Halfshire, par. Kidderminster, at the confluence of the Severn and Stour, 3½ m. SSW. Kidderminster, with the pop. of which town and par. its own is returned. It is wholly of modern date, owing its origin to the Staffordshire and Worcestershire canal, which joins the Severn on its S. side. It is well built, principally of brick, and is partially paved, and lighted with gas. The Severn is here crossed by an iron bridge, the central arch of which has a span of 150 ft., rising to 50 ft. above the surface of the river. Stourport has an extensive transit trade, being, in fact, one of the principal entrepôts between the E. and W. parts of the kingdom. Markets on Wednesdays; fairs, Easter Monday, Sept. 15, Dec. 18, chiefly for hops and cattle; also a meeting every Thursday for hops.

STOWMARKET, a market town and par. of England, co. Suffolk, hund. Stow, on the Gipping, a tributary of the Orwell, on the road and half-way between Ipswich and Bury, 80 m. NE. London by Great Eastern railway. Pop. of town 3,531, and of par. 3,639 in 1861. Area of par. 1,240 acres. The town consists principally of a main street, with many good houses, and has a bustling and thriving appearance. The parish church is large and handsome, part of it being in the decorated, and part in the perpendicular style.

and other sects have meeting-houses, and there are various schools and benevolent societies. Stowmarket is connected by a navigable canal with Ipswich, and has a brisk trade in malt and barley, with manufactures of cordage and sacking. Near it is the house of industry for the hund., a handsome edifice on an eminence, erected at an expense of 12,000*l.* It has petty sessions, a manorial court, and is a polling-place for the W. div. of the co. Markets on Thursdays; fairs, three times a year.

STRABANE, an inland town of Ireland, W. side co. Tyrone, prov. Ulster, on the Mourne, near its confluence with the Finn or Foyle, 1 m. E. Lifford, and 14 m. SSW. Londonderry, on the railway from Enniskillen to Londonderry. Pop. 4,146 in 1861. The town is built on the estate of the Marquis of Abercorn, in a fine valley enclosed by lofty mountains; and has a good linen market, an extensive retail trade, and a considerable trade in the export of grain and provisions, by way of Londonderry. The older parts of the town, along the river, are low, with narrow dirty streets and mean houses; but in the newer parts there are some comparatively good streets, shops, and houses. It has a par. church, a Roman Catholic chapel, two Presbyterian and two Methodist meeting-houses, a fever hospital and dispensary, a market-house and a sessions-house, and a bridewell. It is connected by a bridge with its suburb on the left bank of the river. Under the Municipal Reform Act it has a corporation, entitled the sovereign, free burgesses, and commonalty. Previously to the Union it returned two mems. to the Irish H. of C., but was then disfranchised. It has a par. school, a Lancastrian do., and some other schools. The trade of the town is much facilitated by a canal about 4 m. in length, from it to where the Foyle becomes navigable for barges of 40 tons. Quarter sessions are held in April and October, petty sessions on alternate Tuesdays, and a manor court, with jurisdiction to the amount of 2*l.*, is held once a month. Adjoining the town is a valuable salmon fishery, the produce of which is mostly sent, either fresh, packed in ice, or pickled, to the British markets.

STRALSUND, a strongly fortified town of the Prussian states, prov. Pomerania, cap. reg. and circ. of the same name, on the narrow strait separating the Isle of Rugen from the continent, and on the terminus of a line of railway from Berlin. Pop. 24,314 in 1861, excl. of garrison of 2,278. The town was founded in 1209. Streets narrow and dirty, houses ill-built; but it has a fine arsenal, and some good public buildings. It is encompassed on the land side by lakes and marshes, so that it can only be approached by bridges. Its fortifications, which had been dismantled, have been renovated and greatly improved since 1815, so that it is now one of the strongest places in the monarchy. It has a gymnasium, two public libraries, and an orphan asylum, with breweries, distilleries, and various manufactures; and carries on a considerable commerce, exporting corn, timber, beer, and linens. Its port, though small, is convenient and safe, but it labours under a deficiency of water. Close to the town the depth does not exceed 7 ft., at a little distance it increases to 10 ft., and in the offing there is 13 ft.

STRANRAER, a parl. and royal bor. and seaport of Scotland, co. Wigtown, on flat ground, on the inner or S. shore of the inlet of the sea called Loch Ryan, on the high road from Dumfries to Portpatrick, 21 m. W. by N. Wigtown. Pop. 6,273 in 1861. The town consists of three streets parallel to the shore, united by several cross streets.

in the lanes and outskirts of the town, mostly occupied by Irish immigrants. It has a town-hall, gaol, a church belonging to the establishment, with various dissenting chapels, 1 parochial and 7 unendowed schools, 2 very good subscription libraries, and a good public reading-room. It is the centre of a considerable retail trade; but has no manufactures, except some hand-loom weaving, on account of the Glasgow manufacturers.

Loch Ryan is a fine basin. Opposite to a place called Cairn, on its E. shore, there is good anchorage, and water sufficient to float the largest ships. Strauraer harbour dries at low water; but it would not be difficult, by carrying out the pier to a greater distance into the loch, to make it accessible at all times of the tide. On the 1st of Jan. 1864, there belonged to the port 46 sailing vessels of 2,467 tons. The customs' revenue was 309*l.* in 1863. Steamers regularly ply between the port and Glasgow and Belfast. A large proportion of the pop. are Irish, mostly in an abject state of poverty.

STRASBOURG (an. *Argentoratum*), a fortified city of France, on its E. frontier, dép. Bas-Rhin, of which it is the cap., on the Ill, within a short distance of the Rhine, 100 m. SSW. Mentz, and 250 m. E. by S. Paris, on the railway from Paris to Munich and Vienna. Pop. 82,014 in 1861. The city is of a triangular form, is enclosed by a bastioned line of ramparts strengthened by numerous outworks, entered by 7 gates, and has on its E. side a strong pentagonal citadel, built by Vauban. By means of sluices constructed under Louis XV., the adjacent country may be laid under water; and several additional defences having been constructed since the peace, it is now one of the most important fortresses and arsenals in France, and has the largest dépôt of artillery. Strasbourg is agreeably situated, and generally well laid out: its streets are mostly narrow, with lofty houses; but it has several rather large and regular squares. Though for a lengthened period united to France, it still has all the outward appearance of a German town, with which the costume and language of its inhabs. correspond. The Ill and its branches intersect the city in all directions, and are crossed by numerous wooden bridges. Without the walls are several suburbs.

By far the most remarkable public edifice is the minster, or cathedral, one of the noblest structures of its kind. It is said to have been originally founded by Clovis, in 504; but Charlemagne constructed the choir, the only part that survived the destruction of the old cathedral by lightning in 1007. The modern building was begun in 1015, but not finished till the 15th century. The entire length of the interior is 378 ft.; breadth, 140 ft.; height from the pavement to the roof of the nave, 76½ ft. The W. or grand entrance has, on its N. side, a spire, of the extraordinary height of 437½ Paris, or 465½ Eng. ft., being, if the dimensions be accurate, about 7 ft. higher than St. Peter's in Rome, and about 5 ft. higher than the great pyramid of Cheops. It is of open work, and combines, with the most perfect solidity, extraordinary lightness and elegance. The view from the top of this spire is one of the most extensive and finest that can be imagined: it is, however, enjoyed by few only. The ascent to the top of the tower may, indeed, be accomplished, without much difficulty, and the view from it is superb; but the ascent thence to the lantern requires very powerful nerves, and, in fact, ordinary visitors are not permitted to attempt it. The erection of this famous spire was commenced in 1276, by Erwin

fine sculptures to the principal portal. It was finished in 1439, under the direction of Schulz, an architect of Cologne. Beside the grand portal are equestrian statues of Clovis, Dagobert, Rodolph of Hapsburg, and Louis XIV.; and over its centre is a marigold-shaped window of stained glass, 51 ft. in diameter. The interior has a fine stone carved pulpit, with numerous monuments, statues, &c. There is also a famous astronomical clock, constructed by Isaac Habrecht, which indicates the days of the month, the places of the sun and moon, and other celestial phenomena. In the church of St. Thomas is the magnificent monument in honour of Marshal Saxe, the chef-d'œuvre of Pigalle. Here, also, is a monument to Koch, the historian. The *Temple Neuf*, given, in 1681, to the Protestants in exchange for the cathedral, the church of St. William, the *Château Royal*, the large public library said to contain 130,000 vols., the new synagogue, the theatre (with a handsome front of six Ionic columns), the prefecture and other public residences, the arsenal, barracks, cannon foundry, and other military establishments, and various public schools, are deserving notice. There are several hospitals and asylums, civil and military prisons, an exchange, corn, fish, and other markets, various assurance companies, a royal *dépôt d'étalons*, and a botanic garden. The environs are well cultivated, and Strasbourg has many good public walks; the principal of which is the *Contades*, without the city, laid out by the marshal of that name in 1764.

Strasbourg is a bishop's see, the seat of a court of primary jurisdiction, council of prud'hommes and a chamber of commerce; of a university academy, royal college, mint, boards of forest economy, roads, and bridges, and of customs; the Lutheran consistory for the S. of France, faculties of law, medicine, and sciences, R. Cath. and Protestant seminaries, and societies of agriculture, literature, and arts. The museum of the academy is very rich in the natural products of Alsace. The city is divided into four cantons, in each of which is a justice of the peace and a police commissary. It has an extensive royal manufactory of snuff, for which Strasbourg is famous; with considerable manufactures of woollen, linen, and cotton stuffs, sail-cloth, cutlery, steel articles, metal buttons, cotton twist, leather, hats, paper, playing cards, earthenware, shell articles, printing types, and chemical products, exclusive of dye-houses, breweries, printing establishments, and sugar refineries: the *pâtés de foies gras* of Strasbourg have attained to high gastronomical celebrity. The trade of Strasbourg is very extensive, its situation on the Rhine having rendered it a great frontier entrepôt.

Strasbourg is very ancient, and most probably existed previously to the Romans. It assumed the name of *Strateburguen* in the 6th century. On the first partition of the Frankish territory it was included in the kingdom of Austrasia, and on the second in Lorraine. In the 10th century it belonged to the German emperors, and subsequently became a free city of the empire, which it continued to be till 1681, when it was taken possession of by Louis XIV., and finally annexed to France. Pierre Schæffer, who contests with Gutenberg the honour of being the inventor of printing, and Generals Kellermann and Kleber, are among the distinguished natives of Strasbourg. The latter is buried in the cathedral, and a monument has been erected to his memory on the artillery parade.

Barlieway, celebrated as the birthplace of Shakspeare, 7 m. SW. Warwick, and 121 m. NW. London, by Great Western railway. Pop. of mun. bor. 3,672 in 1861. The town is finely situated on a gentle acclivity rising from the W. bank of the Avon, which here expands to a breadth of about 130 yards, and is crossed by a bridge of 14 arches, built in the reign of Henry VII., but repaired and widened in 1814. In the older parts the houses, though intermixed with others, of more modern date, have an antique appearance: several new streets have, however, been constructed of late years, and the corporation has distinguished itself by the aid it has given to improvements. It has a large, handsome, cruciform church, with a square embattled tower, surmounted by a lofty spire: the transepts, tower, and some parts of the nave are early English; the rest of the building is mostly a mixture of decorated and perpendicular. It has several fine old monuments. Of these the most interesting by far is that of Shakspeare, on the N. wall of the chancel. It is constructed partly of marble, and partly of stone; consisting of a half-length bust of the poet, with a cushion before him, placed under an ornamental canopy, between two columns, supporting an entablature. Under the bust are the following lines:—

*'Judeo Pyllum, genio Socratem, arte Maronem,
Terra tegit, populus meret, Olympus habet.'*

These are followed by six lines in English verse; and on a flat stone, which covers the grave, is an entreaty not to disturb the dust 'enclosed here,' and an imprecation against such as might profane the ashes of the mighty dead.

The living of this church, a vicarage, is in the gift of the earl of Plymouth. Here is also a chapel, that once belonged to the guild of the 'Holy Cross,' suppressed at the Reformation: it is of the age of Henry VII., in the perpendicular style, and has several curious fresco paintings on its walls. Attached to this building is a hall for the brethren of the guild, since used for the meetings of the corporation; almshouses for 24 poor persons of both sexes, and a free grammar school for children, natives of the bor. The modern town-hall, a building of the Tuscan order, erected in 1768, has a hall 60 ft. in length by 30 ft. in breadth. Having been dedicated, at the jubilee in 1769, to the memory of Shakspeare, it is thence called the Shakspeare Hall. It is decorated with pictures, by Wilson and Gainsborough, of the great poet and Garrick; and outside the building is a statue of the poet, which, with the pictures, was presented by Garrick.

Here are national, Lancastrian, and other schools, 2 public libraries, and a neat theatre. The town is governed by a mayor, 3 aldermen, and 12 councillors, but has no commission of the peace. The only manufacture carried on belongs to one of the departments of button-making, and it is by no means extensive. The Avon is navigable by barges from the Severn to Stratford, where it unites with the Stratford canal, which is itself connected with the Worcester and Birmingham canal.

Little, unfortunately, is known of the life of the illustrious poet to whom Stratford owes all her celebrity. He first saw the light on the 23rd April, 1564. Having married in 1582, he soon after went to London, where he produced the greater part of his immortal works; and having returned to Stratford to spend the evening of his days, died there in 1616, on the 23rd of April, the anniversary of his birth. This brief notice comprises nearly

his death occurred little more than two centuries ago. 'No letter of his writing; no record of his conversation; no character of him, drawn with any fulness by a contemporary, can be produced.' (Hallam.)

The house in which the great poet was born, in Henley Street, is still standing, and is the resort of all visitors to the town. It has, however, been converted into two houses, and otherwise much altered. The house in which Shakspeare passed the latter years of his life was, to the disgrace of those concerned, demolished in 1759; when the famous mulberry-tree he is said to have planted in its garden was also cut down.

STRATFORD (STONY), a market town and par. of England, co. Bucks, hund. Newport, on the Ouse, which is here the boundary of the co., and is crossed by a stone bridge, 6½ m. NE. Buckingham. Area of par. 70 acres. Pop. of town, 2,005 in 1861. The town is built on the line of the ancient Watling Street, and is supposed to occupy the site of the *Lactodorum* of the Romans. The houses are mostly of freestone, extending for about 1 m. on either side the road. The parish church was rebuilt in the Gothic style, in 1777; the living, a perpet. curacy, worth 180*l.* a year, is in the gift of the Bishop of Lincoln. There are meeting-houses for various dissenters, national and Sunday schools, and a society for apprenticing children. At an inn in this town, the person of the young king Edward V. was seized, and Grey and Vaughan arrested by Richard duke of Gloucester. The only manufacture is that of lace, but the inhab. have some trade in corn. Markets, which are well supplied with provisions, are held on Fridays: fairs, 21st August, Friday before 10th October, and 12th November.

STROUD, a parl. bor., market town, and par. of England, co. Gloucester, hund. Bisley, on the Slade or Stroud-water, near its junction with the Frome, 9 m. S. Gloucester, and 101½ m. W. London, by Great Western railway. Pop. of parl. bor. 35,517 in 1861. The parl. bor. is not confined to the town, but includes the whole clothing district, of which it may be regarded as the centre, comprising about 14 parishes. The situation of the mills on streams in deep ravines; the scattered and irregular manner in which the houses are built on the hill sides; and the contrast between the high land (in many cases either wood or common, with few inhab.) and the valleys studded with houses and thickly peopled, is altogether very curious. Stroud stands on the side of a hill, and consists chiefly of a long street, crossed by another at its base: the houses are good, and the streets well paved and lighted. The parish church, a large edifice, has a tower with an octangular steeple at its W. end. The living, a perpetual curacy, is in the gift of the bishop of Gloucester. There are places of worship for Baptists, Independents, and Wesleyans; and several charities for educating poor children, and giving relief to the poor.

Stroud, and the district of which it is the centre, owes much of its prosperity to the Stroud-water, which is not only made available for the working of machinery, but is said to be peculiarly adapted to the dyeing of scarlet and other colours. The clothing trade has, in consequence, extended itself principally along the banks of the river, on which there are numerous fulling-mills and other factories. The prosperity of the town and district depends, of course, upon the state of the clothing trade, and partakes of the fluctuations incident to the latter. Power-looms have begun to be in

which passes close to the town, is of great advantage to its trade.

The Reform Act conferred on Stroud, and its adjacent district, as specified above, the privilege of sending 2 mems. to the H. of C. Registered electors, 1,380 in 1865. Petty sessions for the hund. are held in Stroud. Markets, on Fridays: fairs, May 10 and August 21, for cattle, sheep, and hogs.

STUHLWEISSENBURG, a town of Hungary, cap. co. of its own name, 18 m. NE. Lake Balaton, and 35 m. SW. Buda, on the railway from Buda to Trieste. Pop. 18,399 in 1862. Though formerly a Roman town, and a name of frequent occurrence in Hungarian history, it contains nothing remarkable. The palace of the bishop, and some of the buildings connected with it, are handsome; but the streets are badly paved, and the whole town disagreeably placed in the centre of a huge bog. It was, for a lengthened period, the residence of the sovereigns of Hungary, and has a royal mausoleum, in which 14 of them are buried. It has a gymnasium and other R. Cath. schools, a military academy, and a Magyar theatre; with manufactures of woollen cloth, flannel, soap, and leather.

STUTTGARD, a city of S. Germany, cap. of the kingdom of Württemberg; on the Nesen, a small tributary of the Neckar, about $1\frac{1}{2}$ m. from its embouchure in that river, 38 m. SE. by E. Carlsruhe, and 120 m. NW. Munich, on the railway from Heidelberg to Augsburg. Pop. 61,314 in 1861. The city is situated in an amphitheatre of fertile hills; and having been, for the most part, laid out during the present century, is one of the handsomest towns of Germany. The city may be said to stand in the centre of a garden: on every side it is surrounded by vineyards and orchards. In the ancient part of the town, the streets are narrow and crooked; but, in the modern, they are broad and handsome. The court and the military, with the other necessary concomitants of a capital, give it rather a lively air; and there is usually a great bustle in the streets. The new royal palace has the advantage of being situated both in town and country; opening on one side into a fine park, and on the other into a spacious square, planted with trees and fronting the *Königs Strasse*, or King's Street, the finest in the city. The palace is an imposing freestone edifice, begun in 1746, and completed by the late king. It has a centre and two projecting wings; the whole forming, like Buckingham Palace, three sides of a square. The parapets are decorated with handsome statues; but the roof, immediately above the grand entrance, is surmounted with a large gilt crown. There are a vast number of apartments, and several are fitted up with splendid tapestries from the Gobelins at Paris, presents from Napoleon I. to his ally the late king. Besides which, the palace contains many good Flemish paintings and sculptures by Danekker and Canova. In the same public square in which the new palace is situated are the old palace and the theatre. The former, now occupied by the officers of the court or government, has the aspect of a feudal fortress; and behind it is a Gothic church, in which are monuments of the dukes of Württemberg.

Some other buildings are worthy of notice; as the palaces of other members of the royal family, the *Ständehaus*, or chamber of the parliament of Württemberg, to the debates and divisions of which the public are always admitted; the city county-house, chancery court, new barracks, post-office, royal and city schools, large hospital, work-house, royal stud-house, adjoining the palace, with an extensive stud of fine horses, royal stables, and riding-school. Stuttgart has ■ Lutheran

churches, a Calvinist and a Rom. Cath. church, and a synagogue. The public library, open daily from 9 to 12 and from 3 to 5, a very large and valuable collection, comprises from 170,000 to 180,000 vols., including a magnificent collection of Bibles. The museum of natural history comprises a remarkable collection of fossils found at Kannstadt. There are royal cabinets of medals, antiquities, models, maps, charts, and many private libraries and collections. Without having the pretensions of either Munich or Dresden, to be considered a seat of the fine arts, Stuttgart has been distinguished as the birthplace or residence of several of the most eminent German literati and artists; as Schiller, Dannecker, Menzel, long the editor of the '*Literatur-Blatt*,' Baron Cotta, the famous publisher, and others. Many of Dannecker's finest works are in this city, and here Schiller wrote his '*Robbers*.'

Stuttgart is an industrious town, though unfavourably situated for trade. Cotta's publishing establishment is one of the most extensive on the Continent. Next to printing and bookbinding, the weaving of woollen and cotton goods, and the making optical, mathematical, and musical instruments, are the chief branches of manufacturing industry. Some agreeable effervescing wine is made on the surrounding hills; and about 3 m. NE. the city is Kannstadt, resorted to by the citizens and others as a favourite watering-place. Stuttgart suffered severely in the wars of the 16th and 17th centuries, but it escaped with little loss during the last war, though repeatedly occupied by the armies on both sides.

SUDBURY, a mun. and formerly a parl. bor. of England, principally in the co. Suffolk, but partly also in Essex, on the Stour, here crossed by a stone bridge, 18 m. W. Ipswich, and 50 m. NE. London, on the Great Eastern railway. Pop. of munic. bor. 6,879 in 1861. The old parl. bor. included the three pars. of St. Peter, St. Gregory, and All Saints, and some small extra-parochial districts on the Suffolk side of the river, with the hamlet of Ballingden-cum-Brunden in Essex. The town of Sudbury lies towards the S. extremity of the bor. It is a neat, clean, and well-built place. Under the provisions of a local act it is lighted, the footpaths flagged, and the roads kept in repair. The town has been much improved of late years internally, but the buildings have not extended beyond its former limits. Sudbury has 3 churches, All Saints', St. Gregory, and St. Peter; mostly in the perpendicular style, but some of the tracery, and other parts, have been much mutilated. Except a large Independent chapel and a Baptist chapel, there are few or no other buildings worth notice; and no remains exist of the Benedictine priory, founded in the reign of Henry II. The grammar school, founded in 1491, has an income of about 100*l.* a year; and there are various other charities, including a national school, at which about 150 children attend; but the education of the poorer classes here is said to be very defective.

Sudbury was one of the towns in which the immigrant Flemish woollen manufacturers were established by Edward III. Its woollen trade has, however, been for many years nearly discontinued, though it has been partly replaced by that of silk. Mantles, lutes, and gros-de-Naples are the articles principally manufactured. Jacquard looms are not very generally introduced. The Sudbury weavers are said to be less expert in making fine goods than the weavers in Spitalfields, but wages are nearly the same in both. In addition to silk weaving, there is at Sudbury a manufacture of buntings, which employs about

200 looms in the town. These are wrought by women and children, or old men unfit for silk weaving.

Sudbury is governed by a mayor, ■ aldermen, and 12 councillors; and has a commission of the peace, and a weekly court of record. Sudbury sent 2 mems. to the H. of C. from the early part of the reign of Elizabeth. The Boundary Act increased its limits, as already noticed; but having been distinguished for ■ lengthened period by the venality of a large portion of the constituent body, it was disfranchised a number of years since for gross bribery.

Gainsborough, the eminent artist, worthy, as Sir Joshua Reynolds has stated (Fourteenth Discourse), to rank among the first painters of the English school, was a native of Sudbury, where he first saw the light in 1727. Sudbury was also the birthplace of Dr. Enfield, author of the 'Compendium of Brucker's History of Philosophy.'

SUEZ, a town and sea-port of Egypt, near the N. extremity of the gulf of its own name, which is also the NW. angle of the Red Sea, 76 m. E. Cairo, on the terminus of a line of railway from Alexandria. Pop. estim. at 5,800 in 1863; independent of the numerous pilgrims and merchants, who are continually passing through the town, Suez being on the main route between Cairo and Mecca, and on that by which the commerce of Egypt with the countries to the eastward is carried on. The head of the gulf on which the town stands has always been the seat of a considerable transit trade, and the ancient cities of Arsinoe and Kolzum stood in the neighbourhood; but Suez is a comparatively modern as well as a very mean town. Its only gate is to the NW.; three cannon are mounted near it, and there are eight more on the banks of the sea. Suez produces nothing, being on all sides surrounded by the desert. The clothes, and even the provisions, of the inhabs. are all brought from Cairo, to the last loaf. Frequent caravans come from Jaffa and Jerusalem, bringing oil, tobacco, and soap. It suffered much from the French, by whom it was in great part destroyed; and it now consists merely of sundried brick houses and unpaved streets, with about a dozen mosques, a Greek church, and custom-house; the whole surrounded by a ruined wall and some entrenchments thrown up by the French. It is wholly destitute of water, which is brought to it by the Arabs from wells several miles distant, and, besides being high-priced, is of a nauseous description. The port is accessible only by boats of from 30 to 60 tons. Steamers and other vessels moor outside a sand bar at a distance of 2 m. from the town. But since the establishment of what has been called the over-land route to India, and the opening of the railway from Alexandria, Suez has become a place of considerable importance, and is now the residence of a British consul, and of several commercial agents.

The Gulf of Suez, which at low water is in many parts so shallow as to be fordable, is memorable in sacred history as the scene of the submersion of Pharaoh and his host. The isthmus of Suez, connecting Asia and Africa, is a sandy waste, between 70 and 80 m. across. Near Suez may still be seen the vestiges of the canal cut by Pharaoh Necho and Ptolemy Philadelphus, to unite the Red Sea with the Nile—an undertaking which, within the last few years, ■ French company, under M. de Lesseps, has also attempted to accomplish. See EGYPT.

SUFFOLK, a marit. co. of England, having N.

about 820,000 are arable, meadow, and pasture. Surface generally flat. Soil various; that of the middle and most extensive district consists principally of ■ strong loam, on a clay-marl bottom. The district, bounded by the rivers Stour, Orwell, and Brett. S. from Burstall, is a very rich loam, of extraordinary fertility. The maritime district, lying along the E. coast, consists of sandy loam and sand, which in some places is covered with heath. The soil in the NW. parts is comparatively poor, consisting partly of sand and partly of peat. On the whole, Suffolk is not inferior, in respect of natural fertility, to any co. in the kingdom. The climate is dry; but frosts are severe, and in spring the NE. winds are sharp and prevalent. Tillage husbandry is prosecuted with great skill, spirit, and success. Ploughing, in every part of the co., is performed, as in Scotland, by a pair of horses driven by the ploughman, and is extremely well executed. Fallowing is uniformly practised on the heavy lands. These, also, are particularly adapted for the growth of beans, which, as well as peas, are extensively cultivated. Turnips not so extensively grown as in Norfolk, being principally raised on the borders of Cambridgeshire. On clover leys wheat is very generally planted by the dibble; but, when the land will admit, all sorts of grain, as well as turnips, are drilled. Most of the land in beans, peas, tares, &c., is now drilled without any ploughing, being merely scarified and scuffed, so as to be rendered fine enough for the drill to work. The usual rotation in the turnip lands is, 1st, turnips; 2d, barley; 3d, seeds; 4th, wheat: on the heavy lands, 1st, fallow; 2d, wheat; 3d, seeds or beans; 4th, wheat: when the 3d is seeds, beans or oats come in 5th. Hemp has been cultivated for a lengthened period, and is reckoned of the finest quality. Carrots are a good deal grown, and hops are raised in the vicinity of Stowmarket. Suffolk is famous for its breeds of horses, cattle, and hogs. The horses are called *punches*; and are, as the term implies, short and compact, being well fitted for regular farm work.

The cattle have sprung from the Galloways, many of which are fattened in the co. Like their progenitors, they are polled, and rather small-sized. They are better suited than the Galloways for the dairy, being excellent milkers. The produce of butter is not, however, supposed to be in proportion to the milk, though it is also very considerable. Stock of sheep about 500,000. Warrens were formerly numerous in the sandy district, but they are now much diminished. Property much divided; a good deal in the hands of respectable yeomen, who cultivate their own estates. Farms generally large, but many small. They are usually let on lease for 7 or 14 years. Tenants mostly restrained from exceeding 3 corn crops to ■ fallow; but, in other respects, they are left pretty much at liberty. Farm buildings indifferent. Cottages generally bad. Minerals of no importance. This co. was formerly celebrated for its manufactures, particularly those of wool; but they are now much decayed. Mixed silks and worsted stuffs are still, however, manufactured at Sudbury, Gainsford, and other places. There is a considerable manufacture of stays at Ipswich.

Suffolk is well watered, being intersected by the rivers Orwell, Deben, Ald, Blythe, and Lach. It is separated from Essex by the Stour. Suffolk is divided into 21 hunds, and 510 pars. It returns 11 mems. to the H. of C., viz. 4 for the co., 2 each for the bor. of Bury St. Edmunds, Ipswich, and Sudbury; and 1 for the bor. of Eye and con-

4,269 for the western division. At the census of 1861, the co. had 72,795 inhab. houses, and 335,409 inhabitants, while in 1841, Suffolk had 64,041 inhab. houses, and 315,073 inhab.

SUMATRA, the most W. island of the E. archipelago, and, next to Borneo, the largest in the E. seas, between lat. 6° N. and 4° S., and the 96th and 106th degs. of E. long., separated on the NE. from the Malay peninsula by the Straits of Malacca, and on the SE. from Java by the Straits of Sunda, having E. the sea of Java, and surrounded on nearly all other sides by the Indian Ocean. Its direction is from NW. to SE., nearly parallel to the Malay peninsula, it being divided by the equator into two nearly equal portions. It is of an elongated shape, about 1,050 m. in length, and has an area variously estimated at from 122,000 to 128,000 sq. m. Its population has been estimated, by the best authorities, at about 2,000,000. Various mountain chains run through the island longitudinally, sometimes in treble or four-fold ranges, rising under the equator to 14,000 or 15,000 ft. in height, and always much nearer to the W. than to the E. coast. The E. half of the island is, in fact, almost wholly low, flat, and intersected by numerous rivers. Some of these, as the Palembang, Jambi, Indragiri, and Siak rivers, are of considerable size, but they have been hitherto little explored by Europeans. The W. side of the island is also well supplied with water, and in the interior are numerous small lakes. The climate, even in the plains, is not so hot as might be expected in a country situated in the midst of the torrid zone. The thermometer at midday generally fluctuates between 82° and 85° Fahr., though it sometimes rises to 87° or 88° ; at sunrise it is usually as low as 70° . Dense fogs, thunder storms, and water-spouts, off the coasts, are very frequent. The soil on the W. side of the island, which is that best known to Europeans, is a stiff reddish clay, and a great proportion of the surface, especially towards the S., is an impervious forest. Gold dust, which is very abundant, copper, iron, sulphur in the numerous volcanic districts, saltpetre, coal of indifferent quality, and naphtha, appear to be the chief mineral products. The copper ore is very rich, but, owing to the indolence of the inhabs., the mines are little wrought, except over a very limited district. Gold dust is, however, an article of considerable traffic, and is brought by merchants from the interior to the sea-coast, where it is bartered for iron, iron tools, and the piece goods of the E. Indies and Europe. Among the vegetable products, the most important is pepper, the average produce of which may amount, at present, to about 30,000,000 lbs. a year, of which about 21,000,000 are furnished by the W., and 9,000,000 by the E. coast. This supply amounts, in fact, to more than all the pepper supplied by all the other countries in the world. Nearly the whole of this extensive trade is in the hands of foreigners, especially Dutch, English, and Americans. But little Sumatra pepper goes to China.

After the capture of the Moluccas by the British, in 1796, the nutmeg and clove were introduced at Bencoolen; and their culture has well succeeded, though the quality is very inferior as compared with the products of Amboyna and the Banda Isles. Camphor is one of the most valuable kinds of produce, and the Sumatran camphor sells in China for 12 times the price of that of Japan. It is the concrete juice of the *Dryobalanops camphora*, and a tree of the order *Guttiferae* (whereas the Japan camphor is derived from a species of laurel). It grows only in the N. part of Sumatra, not being found S. of the line, or beyond the 2d deg.

of N. lat. It is a stout tree, its trunk sometimes measuring 6 or 7 ft. in diameter. The same tree produces, under different circumstances, camphor, oil, or pitch, which are found in cavities of the trunk, not extending the whole length of the tree, but in small portions of 1 and $1\frac{1}{2}$ ft. long at certain distances. The method of discovering the camphor is, by making a deep incision with a Malay axe, till the camphor is seen: hundreds of trees may be thus mutilated before the sought-for tree is discovered: when attained, it is felled and cut in junks, a fathom long, which are again split, and the camphor is found in the heart, occupying a space of the thickness of a man's arm. The produce of a middling-sized tree is about 8 Chinese catties, or nearly 11 lbs.; and of a large one, double the quantity. (Roxburgh in *Asiat. Researches*, xii.) Rice is the principal species of grain. It is of very different varieties, comprised in the two great classes of upland and lowland, the former being considered the best. The land destined for its culture is chosen at the approach of the dry season; and as fresh ground is frequently cleared for the purpose, the wanton destruction of fine timber is immense. The rice is sown at the beginning of the rains, and ripens in about five months from that time. The same spot of low ground is, for the most part, used without intermission for several years, the degree of culture bestowed by turning up the soil, and the over-flowing water, preserving its fertility. Fallows occur occasionally; but as occupancy in most parts of Sumatra gives the right of property in the land, they are not very frequent.

The *sawahs*, or fields adapted for rice in low and wet situations, are prepared by turning into them a number of buffaloes; or in parts where it is less permanently moist, the soil is turned up either with a wooden instrument between a hoe and a pickaxe, or with a plough. While the *sawahs* are in preparation, a small, adjacent, and convenient spot of good soil is chosen, in which the seed grain is sown as thick as it can well lie on the ground; and after having grown to the height of several inches, it is taken up, in showery weather, and transplanted to the *sawah*, where holes are made, four or five inches asunder, to receive the plants. To the minute care thus bestowed upon the latter, Marsden attributes the large proportion of produce obtained, which, he says, averages 100, and is sometimes as high even as 140 fold. (Marsden's *Sumatra*, p. 77.) A singular method is adopted for separating the grain from the ear. The bunches of paddy are spread on mats, and the Sumatrans rub out the grain under their feet, supporting themselves for the more easy performance of this labour by holding with their hands a bamboo, placed horizontally over their heads. As an article of trade, Sumatran rice seems to be of a more perishable nature than that of most countries, the upland rice not being expected to keep longer than 12 months, and the lowland showing signs of decay after 6. Sago is common in Sumatra, and is used occasionally as food, though not an article of general use. Millet is cultivated, but in no great quantity. The cocoa-nut, betel, bamboo, sugar-cane, various palms, and an abundance of tropical fruits, are indigenous. The sugar-cane is cultivated not for the manufacture of sugar, but for the sake of chewing the juicy reed; and hemp, instead of being used for the supply of materials for cordage, furnishes an intoxicating preparation. Turmeric, ginger, cassia, indigo, coffee, caoutchouc, rattans, many scented woods, and in the N. benzoin, are among the other principal kinds of produce.

Buffaloes are the most important domestic animals.

ox does not appear to be naturalised. The breed of horses is small, but well-made and hardy; sheep also are small. The hog and goat are both domestic and wild. Elephants, and many species of deer, abound; and tigers of a large and powerful species, the rhinoceros, hippopotamus, orang-outang, and bears are met with, besides other animals in great variety. Around the shores extensive coral islands are continually forming; and coral is one of the principal articles of export, the other exports being pepper, rice, camphor, and other native products. The imports are chiefly Indian piece goods, salt, silks, and opium, from Hindostan; coarse porcelain, iron pans, gold thread, and many small articles, from China; striped cottons, spices, krises, and other weapons, from Java, Celebes, and the rest of the archipelago; metals, hardware, cutlery, and broad cloths from Europe.

According to native traditions, Sumatra and the adjacent islands have been the original seat of the Malay race, the type of which is there met in its greatest perfection. The Sumatrans are rather below the middle stature; their bulk is in proportion; their limbs are for the most part slight, but well shaped, and particularly small at the wrist and ankles. Upon the whole they are gracefully formed. The women, however, have the preposterous custom of flattening the noses and compressing the heads of children newly born whilst the skull is yet cartilaginous. They likewise pull out the ears of infants to make them stand at an angle from the head. Their eyes are uniformly dark and clear, and among some, especially the southern women, bear a strong resemblance to those of the Chinese. Their hair is strong, and of a shining black, the improvement of both which qualities it probably owes, in a great measure, to the early and constant use of cocoa-nut oil. The men are beardless, and have chins remarkably smooth, the cause of which is that the boys, as they approach to the age of puberty, rub their chins and upper lips with quicklime, and the few hairs which afterwards appear are plucked out from time to time with tweezers, which they always carry about them for that purpose. Their complexion is properly yellow, wanting the red tinge that constitutes a tawny or copper colour. They are, in general, lighter than the half-breed of the rest of India; those of the superior class, and particularly their women of rank, approaching to a great degree of fairness. No negro or other distinct race appears to occupy the mountainous regions, as in other parts of the archipelago; and the personal difference between the Malays of the coast and the country inhabs. is so little marked, that it requires some experience to distinguish the two.

The original clothing of the Sumatrans is the same with that found by navigators among the inhabs. of the South Sea Islands, consisting of the inner bark of a tree, beaten out to the degree of fineness required, some fabrics being nearly equal in softness to the most delicate kid-skin. The dress of the men comprises short drawers, a close waistcoat with filigree buttons, a robe extending sometimes to the knees, a party-coloured scarf, a sash in which the *kris* or dagger is stuck, and a small turban, or umbrella-hat, while that of the women consists of a boddice, or petticoat, reaching from the bosom to the feet, a robe with sleeves, and sometimes a gauze veil, with various filigree ornaments. Both sexes file, blacken, and otherwise disfigure their teeth; and the great men sometimes set theirs in gold, by casing the under row with a plate of that metal.

The villages are always on the banks of some

bamboo, and on posts, as in other countries of SE. Asia. They are, however, much superior to those constructed among many other Ultra-Gangetic nations. Their furniture is very simple, consisting, in the best kind of houses, chiefly of mats of a fine texture, serving for beds, some low tables, coarse earthenware, brass waiters, and iron pans. In eating, neither knives, spoons, nor any substitutes for them are used. The diet of the Sumatrans is mostly vegetable, but they eat the flesh of buffaloes, goats, and fowls, curried or otherwise dressed. In a few species of manufacture the Sumatrans exhibit great skill; such as in working gold and silver filigree. This art is conducted with the rudest tools. In general they use no bellows, but blow the fire with their mouths, through a joint of bamboo; and if the quantity of metal to be melted is considerable, three or four persons sit round their furnace, which is an old broken *kuali*, or iron pot, and blow together. Yet the manufactured material is celebrated for its delicacy and beauty, not only throughout the E., but in Europe. They weave silk and cotton cloths for home consumption, and some of their work is very fine, and the patterns prettily fancied. Different kinds of earthenware, *krises*, and fire-arms are made, and it is said that formerly cannons were cast at Achin. Little skill is, however, commonly shown in forging iron, or in carpenters' work. The Sumatrans are wholly strangers to painting and drawing; their carvings are always grotesque; and their proficiency in the exact sciences is very limited. Medicine is in the lowest state, being entrusted to old people who, in a great measure, depend on charms and talismans for the cure of diseases. The Sumatrans are fond of music, and have many musical instruments, though most part of these have been borrowed from the Chinese. Their poetry is by no means contemptible, and is much favoured in point of harmony by the Malay language, the smoothness and sweetness of which have gained for it the appellation of the *Italian of the East*. They write in the Arabic character.

Sumatra is divided among a number of native states, the principal being Menangkabow, in the centre of the island, Achin, Siak, Palembang, and Lampong. The European settlements, Bencoolen, Padang, and others, are on the SW. coast, trenching on the country of the Rejangs. Among this people the inhabs. of the villages are under the jurisdiction of magisterial head-men or *dupatis*, who meet at stated periods and places, in an assembly at which the *pangeran*, or feudal superior, presides. These *pangerans* claim despotic sway; but, like the *dupatis*, have, in fact, little more than a patriarchal and judicial power. They levy no tax, nor seem to have any revenue, other than accrues from their determination of cases referred to them in appeal from the decisions of the *dupatis*. And in the immediate neighbourhood of the more powerful states, the *pangerans* seem to acknowledge a kind of vassalage to the sovereigns of the latter. The Rejangs are said to be totally without religious worship of any kind, though not destitute of a belief in supernatural beings. A large proportion of the inhabs. of Sumatra are, however, Mohammedans.

Sumatra was first visited by the Portuguese in 1509, by the Dutch in 1600, and by the English two years afterwards. The latter continued to establish factories and form settlements in the island, during the 17th century, but principally in 1685-6. These settlements were retained by the British till 1825, when they were ceded to the Dutch in exchange for Malacca.

SUNDERLAND, a parl. and mun. bor., sea-

excepted, the greatest port in the kingdom for the shipment of coal, co. Durham, ward Easington, on both sides the Wear, close to its mouth in the North Sea; 13 m. NE. Durham, with which city it is connected by railway, and 245 m. NNW. London. Pop. of munic. bor. 78,211, and of parl. bor. 85,797 in 1861. The parl. bor. comprises, along with Sunderland, the townships of Bishop-Wearmouth and B.-W. Pans on the S. side of the Wear, and those of Monk-Wearmouth, M.-W. Shore, and Southwick, on its N. side; the whole including an area of 5,095 acres. Sunderland and Bishop-Wearmouth, on the S. side of the river, at no distant time, were two distinct towns, at a considerable distance from each other. All the houses in Sunderland appear to be of considerable age; but in Bishop-Wearmouth the intervening space has been gradually curtailed, and at last filled up by buildings, so that at present the two form only one town. With the exception of one street, in which there are some respectable houses and shops, Sunderland presents the appearance of one mass of small houses crowded together, with interstices of narrow lanes rather than streets. The population in them is so dense as to give the appearance of unhealthiness, as well as absence of cleanliness. This is not the case in Bishop-Wearmouth: in the new part of the town that adjoins Sunderland, there are some good streets and excellent houses, and it is in this part that the higher classes of inhabitants reside. This town is increasing rapidly, several new streets have been recently built, and others are in course of building. Bishop-Wearmouth Pans is a small district running along the bank of the river from the parish of Sunderland to nearly as far as the bridge. Its pop. is very dense; it contains some glass manufactories and iron works for the manufacture of such articles as are required for the shipping. Monk-Wearmouth Shore is a large township immediately opposite Sunderland, and part of Bishop-Wearmouth, and has a dense pop., with but few houses or inhabs. of the higher classes. Adjoining Monk-Wearmouth Shore on the W., and extending for some distance along the river, is Southwick. In it are some coal pits and a railway: the greater part of the township, however, is agricultural, and contains very little trading population. Monk-Wearmouth lies to the N. of Monk-Wearmouth Shore, and does not come down upon the river. Its population is almost entirely connected with the trade of the port. The carriage communication between the portions of the town on the opposite sides of the river is by the bridge over the Wear, the most remarkable object in this part of the co. It was constructed between 1793 and 1796, at an expense of about 33,400*l.*, and consists of one magnificent arch, 236 ft. in span, elevated in the centre above 100 ft. above high-water mark, so that large ships sail under it by merely lowering their top-masts. It was disposed of, in 1816, by a lottery of 6,000 tickets, at a price of 30,000*l.*

The parish church of Sunderland is large and handsome; its E. end is particularly elegant, the altar being placed in a circular recess under a dome. St. John's, built in 1769, is a perpetual curacy. Bishop-Wearmouth church has an ancient chancel, and an early decorated E. window, but the rest is modern. Monk-Wearmouth church has had nearly all its ancient features obliterated by modern alterations, though it still possesses a rude Norman tower. There are numerous places of worship for Dissenters in the town and vicinity, including a synagogue. The exchange, a neat edifice in the High Street, erected in 1814, at a cost of 8,000*l.*, comprises commercial, news, and court rooms. The

and excise office are among the chief public buildings. The town has a subscription library, a mechanics' institute, at which lectures are delivered, and several other literary institutions. A school, founded and endowed in 1778, educates and clothes 36 poor girls, and it has also national, Friends', and various inferior schools. A large infirmary occupies a building raised in 1822, and an almshouse for 10 widows or daughters of master mariners was founded and endowed in 1820. There are numerous other almshouses and charities of different kinds. The town is lighted with gas, and well supplied with water.

The port, immediately within the river's mouth, is formed by two piers, each about 450 yards in length, which project one from the S. and one from the N. side of the river into the German Ocean. At the extremity of the N. pier is a lighthouse, having the lantern elevated 73 ft. above the sea at high water: there is also a harbour light on the S. pier, which shows during ebb and quarter flood. At springs there is from 15 to 17 ft. water over the bar, and at neaps from 10 to 12 ft.: the channel is close by the N. pier head. A dock of 6 acres in extent, with a basin, was constructed, in 1838, on the N. side of the river; but, owing to the collieries being mostly on its S. side, this dock did not prove so useful as had been anticipated, and the river continued to be crowded with ships, which at ebb tides were exposed to the risk of danger from grounding. To obviate these inconveniences, a new dock, 27½ acres in extent, was constructed in 1854-56. It has a tidal basin at each end, one opening into the river at the town, and the other into the sea at Hendon Bay, about 1 m. SE. from the town. Both docks are capable of holding up to 500 sail, in 8 to 4 fathoms of water. The staple businesses of the town are the building of ships and the shipment of coal. The former is carried on to a great extent. On the 1st of January, 1864, there belonged to the port 112 sailing vessels under 50 tons, of an aggregate burthen of 3,375 tons, and 808 sailing vessels above 50 tons, of an aggregate burthen of 218,554 tons. At the same time there were 89 steamers, of a total burthen of 15,148 tons. The gross amount of customs' revenue, in 1863, was 86,386*l.* Sailcloth, chain cables, glass, and earthenware are extensively manufactured in the town, and these, with lime, grindstones, and wrought marble constitute, next to coal, the principal articles of export. The adjacent village of Deptford, on the Wear, has a large rope-factory wrought by steam.

Under the Municipal Reform Act, the bor. is divided into 7 wards, and is governed by a mayor, 13 aldermen, and 42 councillors. Sunderland had no voice in the legislature till the Reform Act conferred on it the privilege of sending 2 mems. to the H. of C. Reg. electors, 2,781 in 1865. It has a commission of the peace, a county court, and weekly sessions, besides courts leet and baronial by the Bishop of Durham. Market-day, Saturday, and for cattle every other Tuesday. Fairs, May 11 and 12, Oct. 12 and 13, for cattle.

SUPERIOR (LAKE), the most westerly and most extensive of the great lakes of the St. Lawrence basin, in N. America, being the largest existing body of fresh water. It is of a triangular form, extending between lat. 46° 30' and 49° N., and long. 85° and 92° 20' W. Its length, E. to W., is about 360 m., with a mean breadth of about 80 m., so that its area may be taken at about 28,600 sq. m. Its mean depth is estimated at 900 ft., and the height of its surface at about 640 ft. above the Atlantic. It receives upwards of 50

St. Louis, which enters at its SW. extremity, and the Rivière au Grand Portage. During the melting of the snow, these and the other rivers sweep into the lake vast quantities of sand, boulder stones, and drift timber. It discharges itself at its E. extremity into Lakes Huron and Michigan, by the river and falls of St. Mary. This lake embosoms many large and well-wooded islands, the chief of which is Isle Royal. The country on the N. and E. is represented as a mountainous embankment of rock, from 200 to 1,500 ft. in height; the climate unfavourable, and the vegetation slow and scanty. Upon the S. the land is also high, generally sandy, sterile, and the coast dangerous, subject to storms and sudden transitions of temperature, and to fogs and mists. The mean heat in June and July is about 65° Fah., but a frightful winter prevails for nine months of the year. The Chippeway Indians inhabiting the shores are poor and miserable, depending for subsistence chiefly upon the fish of the lake, and the wild rice of the adjacent savannahs. But, notwithstanding these unfavourable circumstances, the harbours of Grand Isle and Chegoimagon Bay, on the S. coast, are excellent, and the lake is now navigated by steamboats and sailing vessels equal to the craft navigating the lower lakes. The Hudson's Bay Company have several stations round the coasts of this lake.

SURAT, a large town of Hindostan, cap. prov. of Gujrat, and of the British distr. of its own name, under the presid. Bombay, on the Taptee, about 20 m. above its mouth, in the Gulf of Cambay, and 128 m. N. by E. Bombay. Pop. 133,544 in 1858. The town is about 6 m. in circ., shaped like a bow, the chord, formed by the Taptee, having, near its centre, a small castle garrisoned by a few sepoys and Europeans. On other sides the town is surrounded by a wall flanked with semicircular towers. Without the wall are some good European houses, formerly occupied by the French, but now the residences of the English officers: the houses within the town are very inferior, consisting only of timber frames filled up with bricks, their upper stories projecting over each other. The streets, also, are narrow and irregular. Surat has an English church and an English school, with numerous Hindoo schools, and a large European cemetery, containing the tomb of Sir G. Oxendon, one of the earliest governors of British India. The most remarkable building or institution is a hospital for sick animals similar to that at Baroach. During the last century this hospital contained horses, mules, oxen, sheep, goats, monkeys, poultry, pigeons, and a variety of birds; also an aged tortoise, which was known to have been there 75 years. The most extraordinary ward was that appropriated for rats, mice, bugs, and other noxious vermin, for whom suitable food was provided.

Surat had formerly a large trade in all kinds of Eastern produce, but this has greatly declined, and its exports consist principally of cotton wool, which is sent in large quantities to Bombay. Most part of the old manufactures of Surat, except kincobs and shawls, for which there is little demand, have been superseded by those of Great Britain, and the greater number of the native merchants have become poor. Among the traders, however, are numerous Parsees, the descendants of those expelled from Persia by the Mohammedans, who have the reputation of being wealthy. Vessels of 30 or 40 tons may come up to Surat, but those of greater size must lie about 15 m. lower down the river.

of a board of customs, a circuit court, and of the *Sudder Adawlut*, or chief tribunal for the entire presid. of Bombay. It is supposed to be one of the most ancient cities of Hindostan, being mentioned in some of the earliest records. The English factory, founded here in 1615, was the first mercantile establishment of the E. I. Company in the Mogul dominions, and continued to be the chief British station in India till Bombay became the seat of supreme authority, in 1687.

SURINAM. See **GUIANA (DUTCH)**.

SURREY, a co. of England, which, though inland, enjoys, from its being skirted on the N. by the Thames, most of the advantages of a maritime co. It has to the N. Middlesex, and a small part of Bucks, from both of which it is separated by the Thames; on the E. it is bounded by Kent, on the S. by Sussex, and on the W. by Hampshire and Berks. It comprises all that portion of the metropolis to the S. of the Thames, and is thus, in fact, a metropolitan co. Area, 748 sq. m., or 478,792 acres, of which about 400,000 are arable, meadow, and pasture. With the exception of the Weald, the surface consists of alternate hill and dale. Some of the hills rise to a considerable height, affording highly diversified and beautiful prospects. The soil comprises every variety, from the richest loam to the poorest moor. There are three portions, the soils of which are particularly well defined; viz. 1st, the Weald, occupying all the S. part of the co. from Croydon to Haslemere; 2ndly, the sandy loam district, lying between the Weald and the downs; and, 3rdly, the downs, or chalk land, occupying the whole E. side of the co. from Croydon to Tilsey, but gradually decreasing W., till at Farnham, on the border of Hants, it is reduced to a narrow strip. To the NE. of the downs, between them and the Thames, there is a great variety of soil, partly consisting of strong dark clay, and partly of sandy loam. In the NW. and SW. parts of the co., but especially the former, there are very extensive tracts of heath and moorish ground, and smaller tracts of the same kind are met with in various other places. On the whole, however, the co. may be said to be of an average degree of fertility. Climate good; and, owing to the variety of surface, the abundance of wood, and its contiguity to the metropolis, it is one of the most desirable counties in England for a residence. A large proportion of Surrey is in tillage; but agriculture, speaking generally, is in a backward state, and two, or even more, white crops not unfrequently follow in succession. On the rich friable calcareous loams between Croydon and Epsom, 6 quarters of wheat an acre are not unfrequently reaped; and on the rich sandy loams near Godalming, 5 quarters is no uncommon crop; but on the poorer soils, and in the Weald, the produce seldom exceeds from 2½ to 3 quarters. The turnip culture was introduced into Surrey sooner than into any other English co.; but even at present turnips are but seldom drilled; their management is but imperfectly understood, and tares are generally preferred by the Surrey farmers to any other species of green crop. Turnwrist ploughs are used in many quarters, but the swing plough is most common. Lime is extensively used as manure, and the application of salt for that purpose is daily becoming more general. Hops are raised in considerable quantities, and those grown in the neighbourhood of Farnham are preferred to most others. Peppermint, lavender, wormwood, and chamomile are raised in the physic gardens about

the Thames, is appropriated to the production of asparagus and other vegetables for the London market. There is no peculiar breed of cattle in Surrey, but the short horns and the Sussex breed are the most prevalent. A considerable number of sheep are kept, principally on the down-land. Large numbers of hogs are fed; they consist principally of the Berkshire and Chinese varieties. The Dorking breed of fowls is in high estimation; they are large, handsome, perfectly white, and are distinguished by having six claws to each foot. There are no very large estates in Surrey. Farms of all sizes: the largest are on the down-lands, and the smallest in the Weald; but, at an average of the co., the size of farms is not supposed to exceed 170 acres. They are commonly held under leases for 7, 14, or 21 years; but the vicious customs that prevail as to entry defeat the advantages that might otherwise have resulted from this tenure. In the Weald the farm-houses are mean and ruinous, but they are better in other places. Cottages good, and frequently ornamented with vines and flowers. There is a great deal of valuable timber and coppice wood in Surrey, particularly in the Weald. Large quantities of fuller's earth are dug up in various places, and there are also excellent quarries of freestone and limestone. Except in so far as it is connected with the metropolis, Surrey has few manufactures, and those of little or no importance. Besides the Thames, it is watered by the Wey, the Mole, and the Wandle; and it is traversed by the Surrey and Croydon canals, and by a great many railways. Turnpike roads good, but cross roads, particularly in the Weald, very indifferent. It contains 13 hundreds, exc. of the bors. of Southwark and Lambeth, and the town of Guildford, and is divided into 142 pars. It returns 11 mems. to the H. of C., viz. 4 for the co., 2 for the bor. of Guildford, 1 for the bor. of Reigate, 2 for Lambeth, and 2 for the bor. of Southwark. Registered electors for the co. 13,995 in 1865, being 9,913 for the eastern, and 4,082 for the western division. At the census of 1861, the co. had 130,362 inhab. houses, and 853,012 inhabitants, of whom 579,748 belonged to the metropolitan, and 273,264 to the extra-metropolitan district. The gross annual value of real property assessed to income tax, in 1862, amounted to 1,424,546*l.* in the Eastern, and 376,087*l.* in the western division of Surrey.

SUSSEX, a marit. co. of England, on its S. coast, having N. and N.E. Surrey and Kent; S. and S.E. the English Channel; and W. Hants. Area, 1,461 sq. miles, or 936,911 acres. Surface and soil various. A ridge of chalk hills, to which (though in strictness applicable only to a part) the term South Downs is usually applied, runs through the co. from South Harting and Miland Chapel, on the confines of Hants, to Beachy Head, where it terminates in high precipitous cliffs. Their N. declivity is rather steep, but that on the S. is gently sloping. The soil on the South Downs is generally a light hazelly mould, on a substratum of loose chalk. On the S. side of this range, along the coast from Emsworth, gradually decreasing to near Brighton, there is a considerable extent of fine, rich, loamy land. To the N. of the South Downs is the extensive tract called the Weald of Sussex, uniting on the E. with the Weald of Kent, and stretching as far W. as Petworth. The soil of the Weald is similar to that of the Weald of Kent; being, for the most part, a stiff tenacious clay, with occasional sandy and gravelly patches intermixed. It is thickly covered with oak wood; and, when viewed from the South

E. parts of the co., in what is called Pevensey Level, and near Winchelsea, are considerable tracts of very fine, deep, marsh land. Climate mild, dry, and early. A large extent of Sussex is under the plough, but husbandry is in a backward condition. Crops principally cultivated, wheat, oats, and barley; and, on all the light lands, turnips are extensively grown. Great quantities of hops are raised, particularly in the eastern parts of the country. Sussex is deservedly celebrated for its breeds of cattle and sheep, each being about the very best of its kind. The oxen are of a deep red colour, and have tapering turned-up horns; they fatten easily, produce excellent beef, and are not inferior to any other breed in field labour. The greater part of the tillage in the Weald is performed by ox-teams. The native cattle do not, however, answer for the dairy. The peculiar breed of sheep belonging to the co. is called the South Down, from its being found in the greatest perfection on the South Down Chalk Hills. The breed is now widely diffused; but, owing to the extension of tillage on the Downs, and the increase in the size of the animal, and the weight of the fleece, neither the mutton nor the wool is supposed to be so good as formerly. Total stock of sheep estimated at nearly 900,000.

Sussex has been celebrated, from the remotest period, for the abundance and excellence of its timber; and in these respects it continues to be decidedly superior to every other English co. Oak is the principal timber of the Weald, but in other parts beech is most prevalent. To the abundance of wood is principally to be ascribed the circumstance of Sussex being formerly distinguished for the number of its iron works; but since pit-coal began to be generally employed in the smelting and refining of iron, these have been wholly abandoned, as well as those that were formerly established in Kent. Property much divided. Average size of farms in the Weald 100 acres; in the Downs, from 1,200 to 2,000 acres. A great proportion of the farms held by tenants at will; and owing to injurious customs as to entry, a large part of the capital of the tenant is swallowed up in the payments he is compelled to make, so that much of the land is very insufficiently stocked. Offices invariably thatched and weather-boarded. Manufactures of little importance. Ironstone, fuller's earth, limestone, and sandstone are all met with. The rivers are of no great magnitude. The principal is the Arun. It communicates by a canal with Langport harbour on the W., and with the Wey and the Thames on the N. In the Weald there are several ponds in which freshwater fish are fed for the London markets. Sussex is divided into 6 rapes, and these again into 65 hundreds, and contains 310 parishes. It returns 18 mems. to the H. of C.; viz. 4 for the co.; 2 for the city of Chichester; 2 each for the bors. of Brighton, Lewes, Hastings, and Shoreham; and 1 each for Arundel, Horsham, Midhurst, and Rye and Winchelsea. Registered electors for the co. 9,277 in 1865, being 6,670 for the eastern, and 2,607 for the western division. At the census of 1861, the co. had 65,578 inhab. houses, and 366,836 inhabitants. The gross annual value of real property assessed to income-tax, in 1862, was 685,524*l.* for the eastern, and 365,844*l.* for the western division of Sussex.

SUTHERLAND, a marit. co. of Scotland, occupying the NW. angle of the country, has on the N. and W. the Atlantic, E. the co. Caithness and the Moray Frith, and S. the Frith of Dornoch, Ross, and Cromarty. It contains 1,152,640 acres, of which 30,080 are under water. The aspect of

savage. The E. shore has a small fringe of good arable land; but the rest of the surface is rugged and mountainous, being, however, interspersed with various narrow straths, or glens, and some considerable lakes and morasses. Sutherland, like the other Highland cos., was, till recently, occupied by native tenants, similar in all respects to those of Ross. These, however, have, for the most part, been recently removed either to villages on the coast, or have emigrated; and the lands have been divided into extensive sheep farms, furnished with excellent houses and offices. The native breed of cattle is small, but when crossed by those of Argyle and Skye, it is said to be equal to any that the Highlands can produce. Galloways, and other varieties, have also been introduced. Owing to the extraordinary extension of sheep farming in this co., the stock of cattle has been diminished in a still greater degree than in Ross; but sheep being much better suited to the country, the change has been, both locally and in a public point of view, highly advantageous; vast tracts having been, through its means, coupled with a very extensive drainage, rendered considerably productive, that were formerly almost useless. Cheviots are found to thrive remarkably well in almost all parts of Sutherland. About 40,000 sheep and 180,000 fleeces are said to be annually sent to the S. from this co. Four-fifths of the co. belong to the duke of Sutherland, who has expended vast sums in the formation of roads and inns, the building of bridges, piers, farm-houses, and villages, and other expensive and substantial improvements. The fringe of arable land along the E. coast has been divided into moderate-sized farms, well inclosed and drained, and presenting as good a specimen of the improved turnip husbandry as is to be found in any part of the island. No where, indeed, in Scotland have improvements been attempted on a greater scale, or prosecuted with more zeal, skill, and success, than in this remote co. Sutherland has three great deer forests; and ptarmigan, grouse, and blackcock, and alpine hares are abundant. Limestone and freestone are met with. The herring fishery is carried on with spirit and success, both on the N. and W. coasts, but principally from Helmsdale. Principal rivers, Oickel, Fleet, Bosa, and Helmsdale. It contains 13 pars., but no considerable town. The pop., in 1862, was 25,246, living in 4,926 houses. Regist. electors, 181 in 1865. The old valued rent was 2,266*l.*, and the new valuation, 57,339*l.* for 1864-65.

SUTTON COLDFIELD, a market town and par. of England, co. Warwick, hund. Hemlingford, on the road from Birmingham to Lichfield, 6 m. NNE. Birmingham. Area of par. 13,030 acres. Pop. 4,662 in 1861. The town, on an acclivity, in a bleak situation, consists principally of one long street. Houses good, and the inhabs. well supplied with water. The par. church, an edifice of the 13th century, has a statue of Vesey, bishop of Exeter in the time of Henry VIII., a native and a great benefactor of the town. A flourishing free school, founded by Vesey, and national schools, almshouses, and several other charitable endowments, exist at Sutton. The inhabs. are principally employed in the manufacture of Birmingham goods. The town, which is of great antiquity, was chartered by Henry VIII., under a warden, 10 aldermen, and 2 justices. The corporation had various privileges, which have since become void: petty sessions are, however, still held quarterly. Markets on Mondays: fairs, Trinity Monday and Nov. 8, for sheep and cattle.

W. Norwich. Area of par. 8,130 acres. Pop. 3,559 in 1861. The town is finely situated on rising ground, and is well built. The par. church is a spacious and handsome structure, chiefly in the perpendicular style, with a lofty nave, the vaulted roof of which is richly adorned with figures carved in Irish oak; it has a well-proportioned tower, with enriched embrasures and pinnacles, some handsome pillars and monuments, and curious inscriptions. The living of Swaffham with Threxton vicarage and rectory, worth 738*l.* a year, is in the gift of the bishop of Norwich. The Friends, Baptists, and Wesleyans have meeting-houses. The co. bridewell, and a beautiful market-cross, surmounted by a figure of Ceres, erected by Lord Orford, in 1783; a public assembly room, and a neat theatre, are the other principal public edifices. Swaffham has a free grammar and a national school and various almshouses. Quarter-sessions for the co. are held here at Midsummer, besides annual courts leet and baron, and weekly petty sessions. Markets, principally for butter, on Saturdays: fairs, May 12th, July 21st, and Nov. 3rd, for cattle, sheep, and toys.

SWANSEA, a parl. bor., sea-port, and par. of South Wales, co. Glamorgan, hund. Swansea, on the W. bank of the Tawe, at its mouth in the Bristol Channel, 34 m. WNW. Cardiff, and 210 m. W. London by South Wales and Great Western railway. Pop. of bor. 41,606 in 1861. The parl. bor. includes the par. of St. John Lansamlet and the hamlets of Morriston and Clas-Lower on both sides the river, having a total area of about 5,000 acres. The compact portion of the town is about 1 m. in length, N. to S., by somewhat more than $\frac{1}{2}$ m. in average breadth, and consists of three or four parallel lines of thoroughfares crossed by numerous others. It is generally clean and pretty well built, and has been of some reputation as a watering-place. It has an excellent market, attended by all the neighbouring district, with a handsome court-house, in which the assizes, quarter and petty sessions are held, an infirmary, assembly-rooms, theatre, harbour offices, erected in 1860, royal institution for literary and scientific purposes, with a good library and museum; mechanics' institution, poor-house, house of correction, a dorcas and benevolent societies, a society for prosecuting felons, and a branch of the Bank of England. The town is paved, lighted with gas, and well supplied with water. The par. church is comparatively a modern edifice, with a square tower; the living, a vicarage, worth 291*l.* a year, is in the gift of a society. There are, also, a synagogue, Rom. Cath. and numerous other dissenting chapels; and on an elevated site near the centre of the town is Swansea Castle, founded in 1099, now partially converted into a barracks and stores. A free school was founded in the town in 1682, but, like many other charities formerly established at Swansea, it has become nearly extinct. There are, however, several national and Lancastrian, and numerous private schools. Swansea is highly prosperous and increasing. It owes its importance principally to its collieries, and the extensive works for the smelting of copper and other metals established in its neighbourhood. The latter are upon a very great scale; and, in fact, by far the largest part of the copper ore produced in Ireland, Cornwall, and other parts of the U. K., as well as in Cuba and Chili, is brought here for smelting. Swansea has a very extensive trade in the shipping of coal, also two large potteries. The extensive tidal harbour, below the

leaving an entrance 75 yards wide. There is one light on the west pier-head. The harbour contains two floating docks, the north dock and half tide basin of 12 acres extent, and the new docks, called the south docks, 3,000 feet long, 300 to 500 feet wide, and of 18 acres extent, with a half tide basin of 4 acres, were constructed in 1858-59, at a cost of 200,000*l.*; the whole of the bridges, lock-gates, and shipping stages being worked by hydraulic machinery. A canal goes from Swansea to Hennoyadd, in Brecknockshire; and two canals on the opposite bank of the river communicate, one with the adjacent collieries, and the other with the harbour of Neath. There is a tram-road to the Mumbles and Oystermouth westward, by which coals are taken out, and lime and limestone brought in; and tram-roads also connect the different works and the canals and wharfs. Exclusive of coal and copper ore, iron ore, limestone, clay, rotten stone, tin plates, and timber, are brought to Swansea for its own consumption, or for exportation inwards or outwards. There belonged to the port, on the 1st Jan., 1864, 36 sailing vessels under 50, and 105 above 50 tons, besides 19 steamers, of an aggregate burthen of 1,140 tons. The customs' revenue amounted to 8,788*l.* in 1863. The mun. and parl. bors. are co-extensive. The former is divided into two wards, and is governed by a mayor, six aldermen, and eighteen councillors. There was no criminal court within the bor. till 1835, but it now has a commission of the peace and a county court. Swansea was formerly a contributory bor. to Cardiff, the right of voting having been in the burgesses by birth, marriage, or gift, resident or non-resident. It is now joined with Aberavon, Kenfig, Loughor and Neath in sending one mem. to the H. of C. Registered electors for the entire distr. 1,920 in 1865. It is also a polling-place for the co. Markets, Wednesday and Saturday. Fairs, second Saturday in May, July 2, Aug. 16, Oct. 8, and two following Saturdays.

SWEDEN (*Sverige*), a kingdom of Northern Europe, comprising with Norway and Lapland the whole of the Scandinavian peninsula, of which it forms the eastern, southern, and most important portion; between lat. 55° 20' and 69° N., and long. 11° 18' 30" and 24° 13' E., having NE. Russian Finland, from which it is separated by the Tornea and one of its affluents; E. and S. the Gulf of Bothnia and the Baltic, SW. the Sound, Kattegat, and Skagerrack; and W. and N. Norway, from which it is for the most part divided by the great mountain chain of Scandinavia. Length N. to S. 950 m.; average breadth about 190 m. Area, 170,096 sq. m. Sweden is divided into three principal regions, Goetaland (Gothia) in the S., extending to about lat. 58° 45' N.; Sweden proper, occupying the centre as far as lat. 60° 40' N.; and Norland (by far the largest portion), comprising the remainder.

Topography and Mountains.—The Scandinavian peninsula rises gradually from the W. coast of the Baltic until it reaches its greatest elevation in the great mountain chain, usually called the Scandinavian Alps, or Doffrine hills, dividing Sweden and Norway. This chain extends from the Sylt-fjell in about 63° N. lat. and 12° E. long to the N. Cape, in the general direction of NNE. and SSW. It differs from the Alps and Pyrenees in not being a continued chain of summits, but a succession of high table land from 20 m. to 30 m. across, from which the culminating points project. The Sylt-fjell, the loftiest point on the Swedish frontier, is 6,552 ft. above the level of the sea. The other

height. The Helags, within the frontier, has an elevation of 6,100 ft.

Speaking generally, Sweden may be said to be a flat country. There are, indeed, some ranges of high grounds and detached hills, but, on the whole, it is wonderfully level. This is so strikingly the case, that all the way from Gottenburg to Stockholm, by the Orebro road, there is not a single hill or declivity till within a few miles of the capital. About one-twelfth part of the surface of Sweden is 1,900 ft., more than two-fifths 760 ft., and seven-tenths 285 ft. above the level of the Baltic. The remainder, consisting chiefly of the coasts, is of less elevation. These are, for the most part, fenced by numerous rocks and islets. The islands of Gothland and Oeland, in the Baltic, belong to Sweden: they are situated opposite the SE. shores of the kingdom, and Oeland is separated from the main land by a narrow strait, which in one part (opposite Kalmar) is only about 4 m. across.

The S. provinces consist chiefly of vast sandy plains interspersed with small lakes and hills, which are sometimes bleak and barren, but elsewhere clothed with woods. The central region contains extensive plateaux of table land covered with forests. The N. part of the kingdom is diversified with mountains, deep valleys, and glens, alternating with sandy wastes and vast forests.

It was formerly divided into 18, but is now divided into 24 *läns*, or governments. The subjoined table shows the whole population of each *län*, or government, at the end of 1860, with a separate statement of the proportion of the number of inhabs. in the towns of each government.

| Governments | In the whole Government | In the Towns |
|----------------------|-------------------------|--------------|
| Stockholm . . . | 121,787 | 5,674 |
| Upsala . . . | 92,586 | 10,012 |
| Södermanland . . . | 126,705 | 12,838 |
| Ostergötland . . . | 240,770 | 31,565 |
| Jönköping . . . | 171,011 | 10,530 |
| Kronoberg . . . | 152,225 | 8,229 |
| Calmar . . . | 221,029 | 17,979 |
| Wisby . . . | 50,137 | 5,443 |
| Blekinge . . . | 117,875 | 22,586 |
| Christianstad . . . | 209,581 | 8,804 |
| Malmöhus . . . | 284,430 | 44,828 |
| Halland . . . | 119,578 | 9,869 |
| Göteborg . . . | 177,299 | 8,854 |
| Elfsborg . . . | 269,322 | 11,783 |
| Skaraborg . . . | 222,240 | 11,605 |
| Wernmland . . . | 247,171 | 8,934 |
| Oerebro . . . | 151,651 | 10,785 |
| Westmland . . . | 103,300 | 12,567 |
| Kopparberg . . . | 166,949 | 6,612 |
| Gefleborg . . . | 136,061 | 16,417 |
| Westernorrland . . . | 116,689 | 7,671 |
| Jemtland . . . | 61,218 | 1,496 |
| Westerbotten . . . | 81,478 | 2,202 |
| Norbotten . . . | 69,225 | 3,807 |
| Total . . . | 3,710,197 | 285,085 |

Rivers.—Sweden is extremely well watered. Through its N. and central parts twelve large rivers flow into the Gulf of Bothnia. The Tornea, which has the longest course, runs almost due S. for about 290 m.; but the largest is the Angerman, 230 m. in length, so deep that ships of 600 tons load at Nyland, about 70 m. from the sea. Next to these are the Umea, with a course of 250 m., and the Windel, 235 m. in length. The general direction of the rivers falling into the Baltic is NW. to SE. Few of them are of any considerable size, and notwithstanding the generally flat country through which they flow, their

inundations occasioned by the melting of the snows. Some of them increase 18 or 20 ft. in height so rapidly as to carry away large trees, and even to detach immense blocks of granite from the mountains: still, however the inundations occasion little damage, owing to the number of lakes, which serve as so many basins for the reception of the surplus water. There are, in fact, upwards of eighty considerable lakes, occupying in the aggregate a very large surface. The principal of these is the Wener, the largest lake in Europe, after that of Ladoga, between lat. $58^{\circ} 22'$ and $59^{\circ} 25'$ N., and long. $12^{\circ} 20'$ and $14^{\circ} 12'$ E., above 90 m. in length by 56 m. in its greatest breadth, 147 ft. above the level of the sea. It receives many streams, the only outlet for its waters being a channel about 200 yards in width, immediately below which is the celebrated cataract of Trolhætta. Though in parts very deep, a great portion of this lake is so shallow as to render its navigation difficult and dangerous. The lake next in size is the Wetter, 86 m. in length by 16 m. in its greatest breadth. It is about 25 m. SE. the Wener, and 295 ft. above the level of the sea. In some places it is 70 fathoms deep: it is often agitated by sudden and violent storms. The Mœlar lake is an inlet of the sea, extending westward from Stockholm, near its entrance from the Baltic, about 70 m., with a breadth varying from 2 to 20 m. It is deep and clear, contains some hundred islands, and is regularly navigated from April to November. The Hjelmär, a lake lying to the SW. of the Mœlar, to which it is united by a canal, is 35 m. in length, varying to 15 m. in width.

Climate.—For five or six months of the year the surface of the N. parts of the country, from the summits of the mountains to the bottoms of the valleys, is covered with ice and snow. The rivers and lakes are also frozen from October to April. In the central parts, the winter seldom lasts more than three or four months; and in the S. and W. parts, the climate is very similar to that of the N. of Germany. In the N. division a great degree of heat is experienced during a short period of the year. The transition from winter to summer is there, also, very rapid, often occurring within the space of a few days.

On the whole, however, the climate of Sweden is much milder than might be expected from its high N. lat. The winter is not so cold as in countries in the same lat. further to the E., at the same time that the mean temperature of the summer is but little inferior. The mean annual temperature at Petersburg is 37.1° Fahr.; whereas at Stockholm it is 41.93° . The advantage on the side of Stockholm is chiefly in the six winter months, the mean temperature of these being in it 29.4° , and in Petersburg only 21.9° . During the six summer months, the advantage on the side of Stockholm amounts to only 2° ; and in July and August the temperature is 1.80° higher in Petersburg than in Stockholm. The winter is considered by the inhab. as peculiarly pleasant. The roads are always dry; and as the winds are seldom violent, travelling is both rapid and agreeable, the traveller defending himself from the cold by warm clothing. The great defect of the climate is the occurrence of frosts in Aug. and Sept., by which the crops are often injured. Near Tornea, at midsummer, the sun is visible during the whole night. The longest day at that town is $21\frac{1}{2}$, and the shortest $2\frac{1}{2}$ hours. At Stockholm, the longest day is $18\frac{1}{2}$, and the shortest nearly ■ hours in length.

be considered primitive. Granite and gneiss are the predominant rocks; but the former is more extensively diffused than the second, which is found chiefly on the shores of the Baltic, and in the S. part of the kingdom. A remarkable geological feature, which Sweden has in common with some parts of N. Germany and Denmark, is the presence of a vast number of enormous erratic blocks of granite scattered over its surface, especially in the central and S. provinces. In the S. they are collected in long spits or tongues, resting upon the plains, which are quite unconnected with them; more to the N. they are scattered indiscriminately, and so profusely, that scarcely an acre of land is without one or more heaps of them. They seldom exceed 30 or 40 ft. in height above the surface, and form many islands in the lakes, as well as heaps on the plains. There are mountains of secondary formation in Jemtland, Nericia, E. and W. Gothia, and in the islands of Gothland and Öland. Shelly limestone and chalk are met with in Scania. Deposits of oceanic shells are found in the country near Uddevalla; but at Stockholm, Upsala, Hernösand, and at other places on the E. side of the peninsula, the shells discovered are of the kinds belonging to the Baltic, without any mixture of the oceanic. Sweden is rich in mineral products. Among these are iron, the best in Europe, copper, cobalt, zinc, lead, antimony, gold and silver, alum, nitre, sulphur, with porphyry, marble, alabaster, limestone, millstone, whetstone, asbestos, and potters' earth. But the only metals that occur in any considerable quantity in Sweden, and the ores of which are worth working, are iron, copper, and lead; iron being the most abundant, and lead the scarcest of the three.

The subjoined table shows the quantities of the different kinds of minerals and metals produced in Sweden, in each of the years 1861 and 1862.

| Quantities | | 1861 | 1862 |
|---------------------|-----------|------------|------------|
| Iron Ore from Mines | Centner | 10,093,891 | 10,106,100 |
| " Lake and Bog | " | 215,172 | 378,251 |
| Pig | " | 3,884,838 | 4,563,926 |
| Cast Goods | " | 108,115 | 303,170 |
| Bar | " | 3,408,368 | 3,016,078 |
| Manufactures and | | | |
| Steel | " | 503,525 | 534,230 |
| Silver | Lbs. | 2,207 | 2,657 |
| Copper | Centner | 36,000 | 39,911 |
| Nickel Copper | " | 536 | 578 |
| Brass | " | 3,069 | 2,685 |
| Copper Work | " | 10,546 | 8,322 |
| Lead | " | 6,100 | 10,409 |
| Lead Ore | " | 570 | — |
| Zinc Ore | " | 160,600 | 200,400 |
| Cobalt Ore | Lbs. | — | 2,114 |
| Sulphur | Centner | 4,543 | 4,585 |
| Iron, Vitriol | " | 5,200 | 8,133 |
| " | Casks | 2,000 | 2,000 |
| Copper | Centner | 689 | — |
| Red Ochre | " | 1,666 | 1,784 |
| " | Casks | 13,800 | 10,302 |
| Alum | " | 6,946 | 6,312 |
| Porphyry | Rix dols. | 8,700 | 9,600 |
| Marble | " | 24,108 | 28,126 |
| Coal | Tons | 235,000 | 231,478 |

There is a remarkable deficiency of the more valuable products found in secondary formations, as coal and salt. The former, indeed, has been discovered, and wrought, near Helsingborg, in the S. of the kingdom; but it is of very inferior quality: there are no salt beds nor brine springs, and the waters of the Baltic not being largely impregnated with salt, it is wholly imported.

Vegetable Products.—The forests of Sweden are

and firs, which in the central parts are intermixed with ash, willow, linden, and maple; and in the S. with oak, beech, and yoke-elm. Few beeches are found N. of lat. 57° ; oaks are found as far N. as Sundswall. The linden is found as far N. as lat. 61° , the hazel as 62° , the cherry and ash as 63° , and the general limit of the birch and pine woods is lat. $69^{\circ} 30'$. The small dwarf birch, aspen, mountain-ash, and dwarf grey alder are found as far N. as 70° , but only in the valleys and sheltered situations. The walnut and mulberry are almost entirely confined to Goetaland; the chesnut is very rare. The forests were formerly much neglected, and there is now in many extensive districts a great deficiency of timber. Indeed, a considerable proportion of the firewood required for the consumption of Stockholm is brought from Finland. Latterly, however, a great deal more attention has been paid to the forests. Those belonging to the state have been placed under the care of a special institution, and very extensive plantations of oaks and firs have been made. The power of private proprietors to cut down timber was formerly limited; but this restriction no longer exists. In the interior of the country, however, and in such parts as have no facilities by means of water-carriage, or otherwise, for the conveyance of timber to the sea-ports, and are distant from mines, there is but little hope that the forests will ever become an object of considerable attention. Pears, apples, and plums of all kinds, grow in the open air in the S.; but the grape, fig, apricot, and peach do not ripen except in hot-houses. All kinds of melons are grown, currants up to lat. $68^{\circ} 30'$, and gooseberries everywhere, even as far N. as lat. 70° . The soil is suitable for all kinds of pulse crops. Asparagus requires hot-beds in lat. $60^{\circ} 30'$, cabbages cease to come to maturity in lat. 64° , carrots and parsnips grow to lat. $66^{\circ} 20' N.$, turnips and potatoes nearly to lat. 70° . The yellow beet-root is produced spontaneously; the red is cultivated. A close sward of common grass is rarely seen; but docks, thistles, rag-weed, and such roots as infest the land in more S. countries are seldom observed, even by the road side, or in the most neglected spots.

Animals.—The most common wild animals are the wolf, bear, fox, elk, reindeer, roebuck, glutton, ermine, and a species of lynx. The wild boar is now found only in the isle of Oeland. Whales and sea-calves are occasionally found in the Baltic and Gulf of Bothnia; and the porpoise (*Delphinus phocaena*, Linn.) commits great ravages among the fish of those seas. There are few hares, but abundance of other kinds of game. The cock of the wood, or capercailzie (*Tetrao urogallus*), formerly met with in Scotland, and recently introduced into that part of the U. Kingdom, is common in the Stockholm markets, whence it is sometimes brought to London: though inferior in flavour to grouse, it is much larger, sometimes weighing from 14 to 16 lbs., and is altogether a very fine species. Partridges are very plentiful, as are woodcocks and web-footed wildfowl. Eagles and falcons inhabit the cliffs; the wild swan and eider are hunted for their down; and the eggs of the latter are highly esteemed. The seas surrounding Sweden abound with fish; including sturgeon, cod, lamprey, rays, soles, turbot, pilchards, herrings, and the stremming, a small species of herring, which has been latterly very abundant on the E. Swedish coasts. Excellent mackerel and oysters are found in the Kattegat. The rivers and lakes are well supplied with salmon, pike, perch, trout, eels, and numerous fish of the genus *Cyprini*. The pike, perch, barbel, and crayfish are found in the Baltic as well as in the lakes

and rivers. Many of the fish of this sea appear to be of a mixed character, between oceanic fish and those of fresh water.

Agriculture.—The soil of Sweden, though mostly thin and poor, has been greatly improved by the industry of the inhabs. The coast land is usually bare of soil, the naked rock appearing everywhere. The flat alluvial lands around lake Wener, and in the basins and valleys connected with it, consist of a harsh crystalline sand, impregnated with iron, and not very productive; but on the N. side of the lake, in the neighbourhood of Carlstad, the soil is of a superior description. In the country lying between the lake Wetter and the Baltic, there are some very fertile tracts; and round this lake, and the district round Carlstad, especially the latter, agriculture has made great advances; the lands are well cultivated in large farms, and the country resembles some parts of the interior of England, except that the lands under cultivation are not fenced by hedges, but by wooden palings. Of the 170,096 sq. m. forming the surface of the country,

| | Sq. Miles |
|---|-----------|
| Arable Lands occupy | 8,490 |
| Meadows and Common Pasturage | 7,385 |
| Uncultivated Forest and Mountain Land | 187,620 |
| Lakes and Marshes | 22,053 |

The agricultural products consist chiefly of rye, barley, oats, maslin (a mixture of barley and oats), wheat, potatoes, pease, hemp, flax, and almost all the fruits and legumes common in W. Europe. In the S. rye is the most cultivated; in the N. barley, the culture of the latter increasing in proportion as we proceed farther towards the pole; but the grains of all kinds are generally less nutritious than those of the S. of Europe, and are more difficult to preserve. Wheat succeeds as far N. as 63° , but does not ripen in W. Bothnia. Oats seldom ripen N. of lat. $63^{\circ} 20'$, but barley is grown almost to the limits of the pine woods, in lat. $69^{\circ} 30'$. Hops are cultivated up to 62° , tobacco to $62^{\circ} 30'$, and flax to nearly 64° . Buckwheat, madder, and woad are grown in Scania. In some parts of the S. the produce is equal to that of the best cultivated lands in England and France. In parts a return of 7 for 1 is obtained; but generally in Sweden the proportion does not exceed 4 for 1. The uncertainty of the climate and the chances of early frosts are the greatest obstacles with which the agriculturist has to contend; and some singular devices are resorted to, to counteract their effects. In Jemtland, for example, the people pile up large quantities of wood along the N. side of the small patches of land sown with corn, that in case the wind should blow from the N. or N.E. in the evenings of August, they may set them on fire to protect the crop from the frosts. It is usual also in the S. parts of the country to prevent the crop from being injured by frost when in the ear, to draw ropes across the heads of the grain, and shake off the dew before sunrise, which, but for this, would then be frozen. In the N. potatoes supply the deficiency of corn, and are preferred to all other kinds of food. Tobacco is cultivated near Stockholm, but not to any extent. After that of Holland, the flax produced in Sweden is probably the best in Europe. Hemp is at present not much grown, but the government is endeavouring to extend its culture.

The whole arable surface of Sweden is divided into 66,441½ *hemmans* of land. The word *hemman* signifies merely an estate, or homestead, and gives no idea of the value or extent of the land, some being incomparably larger and more valuable than others. It is, in fact, a fiscal division, for the purpose of levying the land-tax according to

ancient assessments. Originally, however, the hemmans belonged, for the most part, to single proprietors; but they are now generally divided into 3, 4, 8, 16, or more parts, and it is rare for a family to possess a hemman entire. Of the 66,441½ hemmans, 771½ belong to towns, 50,000 to private individuals, 359 to the crown, 373 to academies and universities, 201 to colleges and schools, 289 to the church, 204 to hospitals and asylums, 183 to military schools, 31 to sailors, and 4,045 to the army. According to circumstances, the lands are subject to a different amount of taxation: of the estates belonging to the nobles, 3,462 are wholly exempted from all public burdens; and 17,929 estates, partly belonging to them and partly to other privileged parties, enjoy a partial exemption from taxation.

The estates that originally belonged to the nobles, but which, since 1810, may be indifferently held by nobles or commoners, are exempted from the land-tax, and also from the obligation to furnish a soldier for the army, the nobles themselves having been originally bound to personal service in the army. The land-tax was fixed at a certain amount of produce centuries ago. It can no longer, therefore, be fairly regarded as a burden on the land, the value of which really depends on its nett revenue after this fixed charge has been deducted. There is, however, in Sweden, an assessment of 5 per cent. laid on the nett annual value of all estates. But this, though apparently an equal, is, in fact, a very unequal and impolitic tax. Inasmuch as it makes no distinction between the income derived from the rent of land properly so called, and that which is really derived from the capital laid out on the land, and as it operates as an obstacle to improvements. The occupiers of crown lands in Sweden have long had, and still have, leave to constitute themselves the absolute proprietors of such lands, on their paying a sum equal to 6 years' value of the land-tax laid on the land. It is not, therefore, the amount of the burdens falling on the land in Sweden, which are really very moderate, but the influence of the 5 per cent. assessment in discouraging improvements, and, still more, the minute subdivision of the hemmans, occasioned by the continued division and subdivision of heritages, in consequence of the law of equal partition among the children of a family, that are the principal obstacles to improvement. Property is, in many instances, divided into such minute portions as to be wholly unsuited to a proper system of cultivation, and the occupiers are often in the poorest circumstances. There are parcels of land of not more than 40 yds. sq., and a Dalecarlian peasant sometimes sells his landed property for 2 or 3 rix-dollars (3s. 6d. to 5s.), the registration of the sale costing as much as the estate. In some extensive districts there are not, at an average, above 14 acres of arable land to a farm; and in the district of Carlstad, where farms are largest, and agriculture most advanced, the average extent of arable land in each farm may be taken at about 72 acres. At an average of the entire kingdom the arable land may be estimated at about 28 acres per farm. (Thomson's Travels in Sweden, p. 426.)

But, notwithstanding these disadvantages, and those that originate in its backward climate and not very fertile soil, agriculture has made a very material progress in Sweden since 1815. This is partly ascribable to the encouragement afforded by government, and to the establishment of model farms, some of which are managed by agriculturists from Great Britain. One of these, in the vicinity of Linköping, on the S. border of the

about 500 are under the plough. Mr. Stevens, an experienced Scotch agriculturist, who recently visited Sweden regularly every summer, assisting landed proprietors in laying out their estates, and putting them under an improved system of management, says that 'Of late years an enthusiasm has sprung up for the improvement of agriculture among all classes of people not to be equalled in any other continental country. This has been owing, in a great measure, to the exertions of the agricultural societies established within the provinces, and the great interest the landed proprietors now take in the improvement and management of their estates. English and German works on agriculture are studied; improved agricultural implements from Great Britain and other countries are introduced; and in many parts Scotchmen and Germans are seen directing the plough, or conducting the operations of the field.' (Bremner, ii. 218.)

The best evidence, however, of the improvement and extension of agriculture is to be found in the fact that, previously to 1820, there was generally a large importation of corn into Sweden from Dantzic and other parts, whereas that importation has now, in ordinary years, wholly ceased, and there is, on the contrary, a considerable exportation.

Houses in the country in Sweden are mostly constructed of wood, and are roofed with timber, turf, and straw. Gentlemen's houses, however, and houses in towns, are usually covered with tiles. Recently, thick coarse paper prepared with tar has been used for roofing, and is said to answer very well. Slates are very scarce, and there are exceedingly few houses in the kingdom roofed with slate.

It is estimated that *seven-ninths* of the whole pop. are employed in agriculture. Masters and mistresses are authorised, by an old law, to inflict summary corporal chastisement on their servants, with no other limit than that they do not kill or maim; but this law has become obsolete, and at present the corporal chastisement of servants is rare in Sweden, and they are treated with great kindness. The poverty of the soil, and short duration of summer, require a great number of hands during the season for agricultural employments; but during the remainder of the year they are comparatively idle. Since 1830, the price of agricultural labour has been about 8d. or 1s. a day in the S. and centre of Sweden; but in the N. it costs 1s. 4d. a day. Labour is generally cheaper in Sweden than in Norway, from there being a greater number of the agricultural classes who are destitute of property. Rent is most commonly some proportion of the produce, and is usually paid in kind, there being but few districts in which it is paid in money. Labourers are frequently paid by getting a piece of land, which they cultivate for themselves, working on the proprietor's domain certain days in the week.

Mr. Coxe, one of the most trustworthy of travellers, gives the following details with respect to the condition of the Swedish peasantry. (Coxe's Letters, iv. 277-279.) 'I had frequent opportunities of observing the customs, manners, and food of the peasants. On entering a cottage, I usually found all the family employed in carding flax, spinning thread, and in weaving coarse linen, or cloth. The peasants are excellent contrivers, and apply the coarsest materials to some useful purpose; they twist ropes from hogs' bristles, horses' manes, and bark of trees, and use eel-skins for bridles. Their food principally consists of salted fish and fish-bones, and a little

cattle, and salt them for the ensuing winter and spring. Twice a year they bake bread, in large round cakes, which are strung on files of sticks, suspended from the ceilings of the cottages: this bread is so hard as to be occasionally broken with a hatchet, but is not unpleasant. The peasants use beer for common drink, and are much addicted to malt spirits. In the districts towards the W. coasts, and at no great distance inland, tea and coffee are not unusually found in the cottages, which are procured in great plenty, and at a cheap rate from Gottenburg.

The peasants are well clad in strong cloth of their own weaving. Their cottages, though built with wood, and only of one story, are comfortable and commodious. The room in which the family sleep, is provided with ranges of beds in tiers (if I may so express myself) one above the other: on the wooden testers of the beds in which the women lie, are placed others for the reception of the men, to which they ascend by ladders. To a person who has just quitted Germany, and been accustomed to tolerable inns, the Swedish cottages may, perhaps, appear miserable hovels; but to me, who had been long used to places of far inferior accommodation in Russia, they seemed comfortable places of reception. The traveller is able to procure many conveniences, and particularly a separate room from that inhabited by the family, which could seldom be obtained in the Polish and Russian villages. During my course through those two countries, a bed was a phenomenon which seldom occurred, excepting in the large towns, and, even then, not always completely equipped; but the poorest huts of Sweden were never deficient in this article of comfort: an evident proof that the Swedish peasants are more civilised than those of Poland and Russia.

According to the official returns, Sweden has 390,000 horses, 1,800,000 heads of horned cattle, 1,500,000 sheep, and 600,000 hogs. In general, all kinds of domestic animals are inferior. The horses are everywhere small. There is a fine breed in the Isle of Oeland, not more than 3 or 4 ft. high: these, however, are rapidly decreasing. In the S. provs., the number of horses, as compared with the pop., is much greater than in France, or even in England; there being, it is said, in Scania, 243 horses to every 1,000 inhabitants. As we proceed N., the number of horses diminishes; and in Swedish Lapland they disappear altogether, their place being supplied by reindeer, of which some proprietors possess 1,000 head. In Lapland, the reindeer and dog are the only domestic animals. Swedish black cattle are also small; the best are those of E. Gothia and Dalecarlia; in summer they are driven to the mountains, where *châlets*, similar to those of Switzerland, are constructed. The sheep-folds are well kept, and government has endeavoured to improve the breeds by crosses with those of Spain, France, England, and Saxony. Sheep are not reared N. of lat. 63°; goats thrive as far as lat. 65°.

Fisheries form a very considerable branch of industry. The herring fishery on the W. and S. coast commenced in 1740, about which time herrings began to appear in large shoals on the coasts. The quantities annually taken increased until 1798, since which they have decreased; the place of the herring being now supplied by the *stremming*, a fish about the size of the sprat, but of much finer flavour. From 1790 to 1796, the towns of Gottenburg, Kongelf, and Marstrand disposed of 1,972,214 barrels salt herrings, and 261,971 hhds. fish-oil, which fetched together

But, since 1805, the average produce of the fishery has not exceeded 2,000 barrels, the herring having, in a great measure, abandoned the coasts. The *stremming* is cured like the herring, and is often eaten raw out of the pickle; it is extensively used in Finland and the N. of Russia, and forms a favourite dish even with people of condition. The principal *stremming* fisheries are on the coasts of the Gulfs of Finland and Bothnia. The principal salmon fishery is at Dvæfors, on the Klarely, a river which falls into the lake Wener. The salmon fisheries of Norkopping, Gelle, and Herenosand are also very productive. A company in London employs two packet-boats, with wells in the bottom, in trading to Gottenburg for lobsters, which are bought there for 3½d. or 5d. each.

Mines.—The mines of Sweden, though inconsiderable as compared with those of this country, are a considerable source of national wealth. They are principally situated in the central provinces, which have no fewer than 261 out of the 586 mines said to exist in the kingdom. Swedish iron is of very superior quality, and that of the Danemora mines is especially well fitted for conversion into steel; but, owing to injudicious restrictions and the want of coal, the production in Sweden is not as large as it might be otherwise. The quantities produced in 1861 and 1862 have been already given, under 'Geology and Minerals.' Fahlun, the chief mine, has long been in a declining state, the number of workmen at present employed not exceeding 500. The works of this mine are conducted entirely by water-power, and are remarkable for their completeness: connected with them is a manufactory of sulphuric acid. The smelting furnaces and iron works are licensed to produce certain quantities, some being as low as 50 tons, and others as high as 400 or 500 tons; and some fine bar iron works have licenses for 1,000 tons each. These licenses are granted by the College of Mines, which has a control over all iron works and mining operations. The iron masters make annual returns of their manufacture, which must not exceed the privileged or licensed quantity, on pain of the overplus being confiscated.

The college has established courts of mines in every district, with supervising officers of various ranks. All iron sent to a port of shipment must be landed at the public weigh-house, the superintendent of which is a delegate of the college; so that it is impossible for an iron master to send more iron to market than his license authorises. It is true that sales are made to inland consumers at the forges, of which no returns are made out, and in so far the licenses are exceeded; but it is not supposed that the quantity so disposed of exceeds a few thousand tons a year. Every furnace and forge pays a certain annual duty to the crown. Its amount is fixed by the college when the license is granted; and care is taken not to grant the license to any one unless he have the command of forests equal to the required supply of charcoal, without encroaching on the supply of this material, required for the existing forges in the neighbourhood. As the supply of pig-iron is limited to the quantity licensed to be made, the college, in granting new licenses to bar-iron works, always takes into consideration how far this may be done without creating a scarcity of pig-iron. Hence the erection of new forges depends—1st, on having a supply of charcoal, without encroaching on the forests which supply your neighbours; and 2d, on the quantity of pig-iron which the college knows to be disposable. The courts of the mines decide

garding the exceeding of their licenses, an appeal to the college lying from their decision, and ultimately to the king in council, or to the supreme court of the kingdom.

Manufactures.—For many ages, Sweden had none of any importance; the Hanseatic Towns took away its raw materials, and re-exported them manufactured to the country: the other manufactures were then, as they still are in great part, domestic. But about the middle of the 17th century, various manufactures, including those of glass, starch, brass, pins, silk fabrics, leather, soap, steel, and iron articles, besides printing presses and a sugar refinery, were established: the workers in these establishments were mostly from Germany and the Low Countries. Sweden has but few facilities for the formation of great manufacturing establishments; but, owing to the long winter nights, during which most out-of-door occupations are necessarily suspended, she has great facilities for the carrying on of domestic manufactures; and the Swedish peasantry not only supply themselves with most descriptions of agricultural implements and household furniture, but with nearly all the coarse woollen, linen, and cotton goods required for their ordinary use. No foreign or factory-made goods, however cheap, can supersede or materially interfere with this domestic manufacture; for, as the people would otherwise be idle, its products may literally be said to cost them nothing. Several factories have, however, been established in Sweden for the production of the finer descriptions of woven fabrics, some of which have had considerable success. The government of Elfsborg is the grand seat of the domestic manufactures of cotton in Sweden. Of the woollen manufactures, that of cloth is the principal. It is well made, chiefly of the wool produced in the country; but being principally intended for domestic use, and the cultivators making most of what they require, the sale is but small. Norkopping and Stockholm are the towns in which the largest quantities are made. Foreign cloths are prohibited, but the contraband trade is extensive. The manufacture of other woollen stuffs is confined to flannels, serges, and bombazines, which were formerly prohibited, and are now imported in considerable quantities.

The principal glass factory is at Bromse, in Westrogothia. Eskelstuna is the principal seat of the hardware and cutlery business, being a sort of miniature Sheffield: fire-arms are made in it at a factory established by government. The quality of Swedish paper has latterly been much improved, and the quantity so much increased, that considerable supplies are now sent to Denmark and Germany.

The distillation of corn brandy has been constantly increasing since the reign of Gustavus III. In 1772, government, in order, as is supposed, effectually to suppress drunkenness, prohibited distillation; but, as might have been foreseen, the increase of smuggling and clandestine distillation rendered the prohibition useless, and made it be withdrawn. The Swedes are great consumers of ardent spirits. It is well said: '*Le Suédois est sobre, sur tous les points, à l'exception de l'eau de vie. Cette funeste habitude commence dès l'enfance, et doit être regardée comme une des causes de la dépopulation de la Suède.*' (Voyage de Deux Français dans le Nord de l'Europe, ii. 422.) A porter brewery is established near Gottenburg, but the demand for its produce is very limited, not exceeding 5,000 hdds. a year.

The subjoined table shows the number of the

of the articles produced, in the year 1862. The table is compiled after official return.

| Description of Manufactories | No. of Manu- fac- tories | No. of Looms | No. of Work- men | Value of Articles produced |
|--|--------------------------------|-----------------|------------------------|----------------------------------|
| | | | | Rix. Dols. |
| Cloth | 104 | 922 | 3,294 | 11,570,947 |
| Woollen and Half Woollen | 7 | 651 | 913 | 1,593,397 |
| Cotton and Linen | 24 | 2,485 | 1,301 | 5,202,879 |
| Cotton Spinning by Machine | 21 | — | 3,757 | 8,383,938 |
| Sail and Tent Cloth | 7 | 63 | 640 | 425,426 |
| Silk | 6 | 317 | 478 | 1,023,338 |
| Ribbon (Silk) | 1 | — | 71 | 52,466 |
| Hosiery | 13 | — | 821 | 676,820 |
| Cotton Printing | 10 | — | 60 | 103,844 |
| Dyeing | 470 | — | 1,620 | 1,272,066 |
| Sugar Refineries | 10 | — | 1,051 | 12,652,816 |
| Tobacco and Snuff | 93 | — | 2,102 | 5,229,768 |
| Leather | 610 | — | 2,075 | 4,018,076 |
| Glass | 23 | — | 1,239 | 1,610,052 |
| Paper | 83 | — | 1,831 | 2,779,966 |
| Oil | 42 | — | 195 | 1,263,675 |
| Porcelain | 2 | — | 455 | 860,896 |
| Soap (Hard & Soft) | 11 | — | 89 | 720,950 |
| Stearine | 4 | — | 105 | 487,435 |
| Mechanical Workshops | 76 | — | 2,880 | 8,807,017 |
| Beer Breweries | 3 | — | 177 | 493,494 |
| Bricks and Tiles | 64 | — | 569 | 400,714 |
| Tallow Candles | 15 | — | 101 | 390,700 |
| Rope | 23 | — | 195 | 311,151 |
| Clocks and Watches | 133 | — | 319 | 87,982 |
| Playing Cards | 6 | — | 50 | 94,170 |
| Tapestry & Carpet | 20 | — | 310 | 272,748 |
| Chemical Produc- tions | 15 | — | 114 | 265,992 |
| Carriages | 21 | — | 241 | 264,315 |
| Lucifer Matches | 15 | — | 1,010 | 424,883 |
| Wool, and Linen Yarn Spinning by Machine | 9 | — | 169 | 349,013 |
| Chemicals | 9 | — | 31 | 44,500 |
| Cork | 11 | — | 111 | 82,750 |
| Chicory | 6 | — | 112 | 142,704 |
| Other Factories | 546 | 12 | 2,239 | 1,830,041 |
| Total | 2,521 | 4,808 | 80,725 | 69,280,924 |

Excepting oak timber and hemp, Sweden possesses every material necessary for the construction of ships. Saltpetre, potash, and tar are among the secondary articles of manufacture. There are two establishments for the instruction of persons intended for trade or manufacture, one at Stockholm, and the other at Gottenburg. A school for mining is established at Fahlun. Schools, where gratuitous instruction is given in navigation, have been established in five of the principal sea-ports; and no individual can be appointed master or mate of a merchantman without passing an examination in some of these schools, and receiving a certificate of his ability properly to discharge the duties of such situations.

Trade.—The trade of Sweden, which, from the situation of the country, must necessarily be of limited extent, was reduced for a time below even its natural bounds by the policy of the government in endeavouring to bolster up manufactures. Latterly, however, this system has been relaxed; and the trade and industry of the country have both experienced the beneficial influence of the more liberal policy that has been adopted. The exports consist almost wholly of raw produce, of which iron and timber, especially the former, are by far the most important articles: next to them are copper, alum, corn, tar, and cobalt. The imports principally comprise sugar, coffee, and other colonial products, salt, wines, silk and wool, cotton,

ports and exports in each of the years 1860, 1861, and 1862:—

| Years | Imports | | Exports | |
|-------|---------------|-----------|---------------|-----------|
| | Rix Mynt Drs. | £ | Rix Mynt Drs. | £ |
| 1860 | 82,469,000 | 4,581,611 | 86,496,000 | 4,805,333 |
| 1861 | 106,570,000 | 5,920,555 | 81,084,000 | 4,504,666 |
| 1862 | 98,520,000 | 5,473,338 | 86,638,000 | 4,813,222 |

The foreign trade is principally carried on with Great Britain, the United States, Holland, Hamburg, and Denmark. It principally centres in Stockholm and Gottenburg.

The currency consists almost wholly of paper, and though, since 1835, bank notes may be freely exchanged for paper, there is little or no demand for the latter. The *rix-dollar banco*, in which all mercantile transactions are carried on, is worth about 20*d.* sterling; the *riks-geld dollar*, used as the medium of exchange in ordinary transactions, being worth two-thirds the former, or 13½*d.* *Rix-dollars banco* are exchanged for *rix-dollars specie*, at the rate of 2½ the former for one of the latter, and all *rix-dollars* are divided into 48 skillings. The notes in circulation vary from 8 skillings to 500 *dollars banco*. Such is the prejudice in favour of paper money, that, in the small towns and remote districts, coins, excepting those of copper, to a small value, are often refused as payment.

The Swedish foot=11·684 Eng. in.; the *aln*=2 feet; the fathom=3 ells; the *rod*=8 ells.

Roads, Railways, and Canals.—The main roads to and from Stockholm are generally excellent and well kept, but the cross roads are comparatively neglected. A landholder is bound to keep in good repair that part of the public road which passes through his possessions; but it is needless to say that it is very difficult to enforce this regulation. The system of posting, though affording every facility for the traveller, is onerous on and injurious to the agriculturists. On all the principal routes, post-stations are established every 7 or 10 m. apart, to which the farmers and peasants of the district are compelled to furnish horses and a driver to the next post-station, at a very low rate, for any traveller who may require them. The station-master has the privilege of being the only innkeeper out of the towns; but he also is obliged to keep horses to perform the same duties as those of the farmers on certain days in the week. Severe penalties, and even corporal punishment, are inflicted on the peasantry for any default in the fulfilment of this duty.

Within the last few years, various lines of railway have been constructed in Sweden. The main line runs from Stockholm to Gottenburg, with a branch to Jönköping and Malmo, opposite Copenhagen. This line is state property. Various short railways in the north have been constructed by private companies. The total length of lines opened in Sweden, on the 1st of January, 1864, was 424 Eng. m.: they were constructed at the average cost of 42,907*l.* per m. The number of passengers conveyed over these railways, in the year 1863, was 996,868. The total receipts, from all sources, amounted to 160,506*l.*, and the working expenses to 110,056*l.*, leaving a net revenue of 50,450*l.*, or 119*l.* per mile.

The formation of a system of internal navigation that should connect the Kattegat and the Baltic, has long engaged the attention, and occupied the efforts, of the people and government of Sweden. Various motives conspired to make them embark in this arduous undertaking. The Sound, and other channels leading to the Baltic, being commanded by the Danes, they were able, when at war with the Swedes, greatly to annoy

the latter by cutting off all communication by sea between the E. and W. provs. of the kingdom. And hence, with the view partly of obviating this annoyance, and partly of facilitating the conveyance of iron, timber, and other bulky products, from the interior to the coast, it was determined to attempt forming an internal navigation, by means of the river Gotha, and the lakes Wener and Wetter, from Gottenburg to Soderköping on the Baltic. The first and most difficult part of this enterprise was the perfecting of the communication from Gottenburg to the lake Wener. The Gotha, which flows from the latter to the former, is navigable, through by far the greater part of its course, for vessels of considerable burden; but, besides other obstacles less difficult to overcome, the navigation at the point called Trollhætta is interrupted by a series of cataracts about 112 ft. in height. Owing to the rapidity of the river, and the stubborn red granite rocks over which it flows, and by the perpendicular banks of which it is bounded, the attempt to cut a lateral canal, and still more to render it directly navigable, presented the most formidable obstacles. But, undismayed by these, on which it is, indeed, most probable he had not sufficiently reflected, Polhem, a native engineer, undertook, about the middle of last century, the Herculean task of constructing locks in the channel of the river, and rendering it navigable. Whether, however, it was owing to the all but insuperable obstacles opposed to such a plan, to the defective execution, or deficient strength of the works, they were wholly swept away, after being considerably advanced, and after vast sums had been expended upon them. From this period, down to 1798, the undertaking was abandoned; but in that year the plan was proposed, which should have been adopted at first, of cutting a lateral canal through the solid rock, about 1½ m. from the river. This new enterprise was begun under the auspices of a company incorporated in 1794, and was successfully completed in 1800. The canal is about 8 m. in length, and has about 6½ ft. water. It has 8 sluices, and admits vessels of above 100 tons. In one part it is cut through the solid rock to the depth of 72 ft. The expense was a good deal less than might have been expected, being only about 80,000*l.* The lake Wener, the navigation of which was thus opened with Gottenburg, is, as already seen, very large, and is encircled by some of the richest of the Swedish provinces, which now possess the advantage of a convenient and ready outlet for their products.

As soon as the Trollhætta canal had been completed, there could be no room for doubt as to the practicability of extending the navigation to Soderköping. In furtherance of this object the lake Wener has been joined to the lake Wetter by the Gotha canal, which admits vessels of the same size as that of Trollhætta; and the prolongation of the navigation to the Baltic from the Wetter, partly by two canals of equal magnitude with the above, and partly by lakes, is now completed. The entire undertaking is called the Gotha Navigation, and ranks among the very first of the kind in Europe. Besides the above, the canal of Arboga unites the lake Hielmar to the lake Moelar; and, since 1819, a canal has been constructed from the latter to the Baltic at Södertelge. The canal of Stroemsholm, so called from its passing near the castle of that name, has effected a navigable communication between Dalecarlia and lake Moelar.

Revenue and Expenditure.—The budget of the kingdom is voted for the period of three years. The following were the leading features of the budget for the years 1864–66:—

ANNUAL INCOME, 1864-65.

| | |
|---|--------------------------|
| Rent from Crown Lands and Fisheries . . . | Rix-dollars 8,447,358 |
|---|--------------------------|

EXTRAORDINARY ANNUAL INCOME.

| | |
|------------------------------|---------------------------|
| Gross Revenue, Customs . . . | Rix-dollars 14,000,000 |
| " " Post-office . . . | 1,500,000 |
| " " Stamps . . . | 1,300,000 |
| " " Excise on Brandy . . . | 8,400,000 |
| | <hr/> 25,200,000 |

| | |
|------------------------------|---|
| Total estimated Income . . . | Rix-dollars 33,647,358 £7,290,271 |
|------------------------------|---|

The yearly expenditure, 1864-65, was divided under the following heads:—

| | |
|--|--------------------------|
| Civil-list | Rix-dollars 1,230,000 |
| Justice, including Prisons . . . | 2,180,570 |
| Foreign Department | 479,200 |
| Army and Ordnance | 9,585,740 |
| Navy | 3,634,950 |
| Civil Administration | 3,857,265 |
| Finance (including the Charges of collecting Revenue) . . . } | 5,450,075 |
| Public Instruction | 3,624,516 |
| Superannuation Fund | 1,194,682 |

| | |
|-----------------------------------|---|
| Total estimated Expenditure . . . | Rix-dollars 31,237,000 £6,768,000 |
|-----------------------------------|---|

| | |
|------------------------------------|--------------------------------------|
| Annual estimated Surplus | Rix-dollars 2,410,358 £522,271 |
|------------------------------------|--------------------------------------|

Through the energetic efforts of King Charles XIV.—formerly General Bernadotte—the whole public debt of Sweden was liquidated during the years 1819 to 1840. Subsequent events, however, made the creation of a new debt necessary, the first part of which was contracted in England, in 1852, to the amount of 450,000*l*. A further sum of 8,000,000 marks, or 185,000*l*., was borrowed at the Hamburg Exchange in the following year; and, soon after, a loan of 20,000,000 rix-dollars, for the establishment of a system of railways by the state, was negotiated by the banking house of Johns & Co., Stockholm, at 5½ per cent., to be repaid in forty years. The latter sum proving insufficient for the purpose, another loan of 25,000,000 was taken up by Swedish capitalists, at 5 per cent. interest. The breaking out of the commercial crisis of 1857 induced the government to contract a further debt of 12,000,000 rix-dollars, at 4 per cent., for the relief of distress in the mining and manufacturing districts. The whole debt of Sweden, at the end of 1862, was close upon 50,000,000 rix-dollars, or 11,250,000*l*. To this was added, in May, 1864, a new loan of 2,223,000*l*., contracted—at 92—with British banking houses.

Government and Constitution.—The government is a monarchy, hereditary in the male line, with a representative diet, one of the most ancient in Europe. The king must be a Lutheran, and his person is inviolable. He is assisted by a state council, composed of 10 members, including the ministers of justice, foreign affairs, war, marine, interior, finance, and public worship, and three councillors. The army and all foreign relations are under the immediate control of the king; but he cannot decide on any matter touching any other branch of government, without the concurrence of the council. He nominates to all appointments, both military and civil; concludes foreign treaties, declares war, and makes peace; and has right to preside in the supreme court, and to grant pardons. The princes of the blood-royal are excluded from all civil employments. The different departments of justice, war, marine, mines,

of four separate chambers, consisting respectively of deputies from the nobility, clergy, burghers, and peasants or cultivators, the latter class having acquired the privilege of sending representatives towards the end of the 15th century. Since 1820, the proprietors of iron works have obtained the privilege of sending three deputies to the chamber of burghers to watch over their interests. The king nominates the presidents or speakers of the chambers of nobles, burghers, and peasants; the archbishop of Upsal being president, *ex officio*, of the chamber of clergy. The diet is convened every five years, and usually sits for three or four months, but occasionally, as in 1840-41, for a much longer period. The head of every noble family is, by law, a member of the chamber of nobles; but, notwithstanding that the nobility include in all about 13,500 individuals, it is but seldom that the chamber of nobles is attended by above 500 individuals. The clergy have 60 deputies, the burghers 85, and the peasants generally from 140 to 150, chosen by the arrondissements; the deputies for the clergy, burghers, and peasants receive salaries during the sitting of the diet from their constituents. No new tax or impost can be established without the concurrence of the diet, nor can any modification of the constitution be legally effected without the concurrence of all the chambers composing the diet.

The four chambers deliberate and vote separately; but all questions must, previously to their decision in the chambers, be referred to standing committees chosen at the commencement of the diet, consisting of an equal number of members from each order. In constitutional questions, which cannot be decided in the same diet in which they are raised, the unanimous consent of the four orders is required, but in other matters the decision of three orders is valid. When two orders are opposed to two, the subject, according to its nature, is either dropped, or referred to the decision of a special committee, composed of 80 members of each order. Differences on minor points are adjusted by the committee, to which the matter was originally referred.

In most cases the decrees of the diet must be submitted to the king, who has an absolute veto; and it is a curious circumstance, peculiar to what M. de Pradt called the *semi-constitutional* government of Sweden, that frequently the king has refused his sanction to the resolutions of the diet, and the diet has negatived the proposals of the king, without occasioning a change of ministry, or exciting any deep feeling of animosity on either side. The king used his privilege of the veto to a great extent in negating measures agreed to by the diet of 1840-41. This anomaly is increased by the absolute legislative power, which the constitution confers on the king in all matters of internal administration and police, in regard to which the diet merely presents addresses and petitions expressive of their views and wishes.

Previously to the diet held immediately subsequent to the revolution of 1809, the nobility enjoyed several valuable privileges and fiscal immunities. These, however, they then wisely surrendered, stipulating only for the general freedom of trade, externally and internally—a stipulation which has not hitherto been fully carried out. The division of the diet into separate chambers, representing particular orders of the state, is, therefore, less objectionable now than formerly, though it be still necessarily productive of considerable inconvenience.

dent order of the diet, have interests to support that are in many respects peculiar, and which may sometimes, perhaps, be opposed to those of the public, at the same time that they are mostly all more or less dependent on the crown.

The chamber of burghers consists of representatives of the guilds, trades, and corporations of the different towns. These, as every body knows, are possessed of certain franchises and immunities which go to obstruct competition, and, consequently, to enhance the cost of the articles furnished by the privileged class.

The deputies of the peasants represent by far the greater number of the people, though not the greater portion of the property of the country; and are, themselves, seldom in such circumstances as to enable them to act a really independent part. And hence, in consequence partly of the constitution of the diet, which opposes the greatest obstacles to all organic changes, how expedient soever, and partly to apparent rather than real inequalities in the privileges of the different orders, a good deal of discontent prevails in Sweden. It is, indeed, hardly possible that the present complicated and vicious system should be able to maintain its ground much longer; and the best way to avoid the recurrence of another of those revolutions so frequent in Swedish history, will be to adopt measures for obviating the defects inherent in the existing political organisation of the country, and for making the diet a representation, not of class interests, but of the intelligence and property of the kingdom. Still, however, there can be no doubt, notwithstanding the defects in its constitution, that the country has made a rapid progress during the last twenty years, and that there is every prospect of this progress being continued.

Justice.—The 24 *läns* are subdivided into 117 *fogderier*, or districts, each comprising one or more *härades*, or cantons. At the head of each *län* is placed a governor, charged with the civil and military jurisdiction, and the receipt of the revenue. Every canton is under the superintendence of a *länsmän*, who is the executive officer of the administration, and subordinate to a *kronofogde*, or kind of sub-prefect, with authority over four or five cantons. There are 264 courts of original jurisdiction, or *hærad* courts, with a judge presiding over each. These courts sit three times a year, and 12 peasants are elected by the peasantry of each *hærade*, who serve as jurymen for two years. There are 3 royal judicial courts; viz. at Stockholm, for the upper or N. provs.; at Jönköping, for the middle; and at Christianstad, in Scania, for the S. provs. The first has, subordinate to it, 7 inferior tribunals, the second 6, and the third 3. These are the highest courts of appeal from the inferior tribunals, and have alone jurisdiction in all criminal cases affecting life or property, as well as in all affairs above the value of 4*L*. The decisions of these courts are subject to the review of the supreme court of justice, composed of 12 councillors, and presided over by the minister of justice. There are *lagmans' courts*, to which appeal is first made from the inferior tribunals, but they are generally considered superfluous establishments. Questions of divorce are brought before the ecclesiastical courts.

Sweden being almost wholly an agricultural country, with but few manufactures, and only one large town, and having, also, a constitutional government, and a widely diffused system of public instruction, it might be expected, *à priori*, that it would exhibit a high state of moral feeling, and a remarkable paucity of crime. Such,

however, is far from being the case; and though there can be no doubt that the representations as to the depravity and immorality of the Swedes, given by some travellers, are far too highly coloured, still it must be confessed that crime and immorality prevail to an extent not easily accounted for.

Army.—The Swedish army comprises three different kinds of troops; viz. enlisted soldiers, always on pay and duty, *indelta* soldiers, and the conscription, or local militia. The numbers of the two first are given in the following table:—

| Enlisted Troops | | Indelta Force | |
|-----------------|-------|----------------|--------|
| Horse Guards . | 1,000 | Cavalry . . . | 7,000 |
| Artillery . . . | 5,446 | Infantry . . . | 24,500 |
| Infantry . . . | 2,200 | | |
| Total . . . | 8,346 | Total . . . | 31,500 |

The militia is roughly estimated at about 95,000 men. The *indelta* system, which is peculiar to Sweden, originated with Gustavus Adolphus, was permanently established by Charles XI., and has continued, with some trifling modifications, in full operation to the present day. 'To understand it fully,' says a traveller, 'it must be borne in mind that the whole of Sweden is divided into military districts or provinces, each of which is bound to contribute a certain number of men to this branch of the national force. Each holder of as much crown land as forms a *hemman* is bound to provide a man, to whom he assigns a croft of land, with a cottage, cowhouse, and barn, and an annual money allowance of about 1*L*. 8*s*., one suit of rough clothes, and two pairs of shoes. The croft is cultivated by the soldier himself while at home; but during his absence on service with the army at the annual reviews, or on any government employment, it is cultivated by the landholder for behoof of the family. When the soldier dies, his widow and children transfer the house, &c., to his successor, whom the landholder, under a considerable penalty, is bound to provide within three months. To furnish a cavalry soldier with his horse, &c., two or three *hemmans* are united; but both in regard to cavalry and infantry, the provinces are divided in such a manner that the colonel of each regiment shall have his farm (also provided in the way just explained) as nearly as possible in the centre of the regiment; a captain in the centre of his company; and so down, through the lowest non-commissioned officers. The farms occupied by officers are large and valuable. The landholders are bound to transport the men, with their baggage, to the annual reviews, and to allow them so much a day for their expenses. Government furnishes the uniforms, and in time of war gives the men higher pay, which is afterwards raised from the landlords. In time of peace, these soldiers are turned to excellent account, by employing them on roads and other public works; and, when not required for these purposes, they are bound to labour for the respective landowners, at the current rate of daily wages. The number of officers in this corps, as indeed in the whole Swedish army, is unusually small, there being only one officer to about every 40 men, while, in France and Austria, there is an officer to every 12.' Sundays are the usual days of inspection.

The militia consists entirely of foot soldiers, provided with clothing and arms by the government. The artillery train is composed of about 220 pieces of various calibre. The chief arsenals are at Stockholm, Gottenburg, and Christianstad.

The principal fortresses are, Wanas, on the lake Wetter; Waxholm, near Stockholm; Carlscrona, and Christianstad. In the island of Gothland, where there are no lands fit for the maintenance of the troops, all the male inhab. between the ages of 20, and 50 may be called on to take arms in defence of the island, if attacked.

The annual expense to the country of an indelta regiment of 1,200 men, amounts to about 8,500*l.* sterling. The whole cost of the army and fortresses, exclusive of the maintenance of the indelta troops, is fixed in the budget of 1864-65, above given, at 9,585,740 rix-dollars.

Navy.—The naval force of Sweden consisted, at the end of 1863, of 2 screw steamers of the line, of 74 and 70 guns and 350 and 300 horse power; 4 screw frigates, of 10 and 8 guns and 300 and 200 horse-power; 8 corvettes, of from 5 to 7 guns, of which 4 are steamers; 125 gunboats, of 1 and 2 guns and from 60 to 70 horse-power. There were building, at that time, 2 screw frigates, 2 paddle-wheel steamers for transports, and a number of gunboats. The permanent seamen at command of the government may amount to about 8,000 men. They are maintained in the same way as the indelta troops, by assignments of lands. Together with conscripts, the whole naval force may be augmented to about 24,000 men. The Swedes are excellent sailors, and especially skilful in the management of small craft. The chief naval stations are Carlscrona, Stockholm, and Gottenburg.

Religion.—The religion of the state, and of nearly all the inhabs., is the Lutheran; there being only about 2,000 Catholics and under 1,000 Jews. There is one archbishopric, that of Upsala; and eleven bishoprics. The functions of public worship are exercised by about 3,000 ecclesiastics. The higher order of the clergy are nominated by the king from lists presented by each diocese: the election of curates and others of the inferior orders is left to the people at large. The revenues of the clergy generally are derived from church lands: the bishops receive, in addition, a tithe on corn, and one from the inhabs. of the four or five pars. surrounding the episcopal residence. The revenue of the archbishop of Upsala does not exceed 800*l.* a year. The richest bishopric, that of Linköping, is worth about 560*l.* a year. The bishop of Herenosand has scarcely 240*l.* a year. The clergy are an important body. All sects are tolerated in Sweden, but with this important restriction, that Lutherans only can be advanced to any employment under the state.

The churches are generally well kept, and great attention is paid to the outward forms and ceremonies of religion. Much more liberality is shown towards Jews in Sweden than in Norway; and there are synagogues at Stockholm, Gottenburg, Norköping, and Carlscrona. A dissenting sect called *Läsere*, or readers, has lately become very numerous in Lapland and the N. parts of the country. 'In Sweden, generally,' says the traveller before quoted, 'all kinds of amusements begin the moment that public worship is over: in the country, dancing and drinking; in the capital and large towns, theatres, equestrian exhibitions, rope-dancing, balls, &c. In fact, the Swedes appear to regard the sabbath as terminated with the service of the day; but to atone for shortening it so much, they commence its observance, at least in the rural parishes, at six o'clock on the Saturday evening. As soon as that hour strikes all week-day labour ceases, the whole family clean themselves, and the devotions of the evening are begun.'

Public Instruction.—Elementary instruction is in a very advanced state in Sweden. Every adult

person must give proof of ability to read the Scriptures before he can exercise any act of majority; and notwithstanding the dispersion of the pop., it is said that there is not one individual in 1,000 of the adult pop. unable to read. Parents in the humblest circumstances are all able to give instruction in reading and writing to their children. No qualification is required in a teacher by the local authorities other than good character, it being left to the public to decide as to the capacity of the teacher and the merits of his modes of instruction.

There are two universities, viz. those of Upsala and Lund, at either of which the instruction is of a very superior description. Subordinate to these are the gymnasias, or provincial high schools, in which are taught the branches of education necessary for the students before entering the universities. An academy for perfecting the Swedish language was founded by Gustavus III. in 1786, and a royal academy of sciences originally established by Linnæus. There are special schools for the military and naval service, and others of history.

The press is free by law, every man being responsible for what he publishes. In 1812, however, a temporary power for the seizure of periodical publications was granted by the diet, and has been since continued, notwithstanding the efforts to obtain its abolition.

Arts.—The arts and sciences have been successfully cultivated in Sweden. Antiquities formed the first objects of national research; but their study was superseded in the time of Linnæus and Scheele by that of natural history and chemistry. The reign of Gustavus III. was the most flourishing period of the arts and literature. The Swedes annually import from 6,000*l.* to 7,000*l.* worth of foreign books, mostly French, English, and German. Among distinguished authors and men of science, Sweden has produced an extraordinary number of great men, among them Linnæus, Tycho-Brahe, Scheele, Bergman, Puffendorf, and Berzelius. The taste of the ancient Scandinavians for music appears in the present day to have descended to only the higher and middle classes. At Stockholm there is an opera, which, as well as the theatre at Gottenburg, is regularly open during a part of the year.

Races.—With the exception of a few Finns and Laplanders, in the more northerly parts of the kingdom, the inhabitants of Sweden are wholly of Gothic descent. The Finns, however, are supposed to have at one time occupied the whole country, and to have been driven to the forests and fastnesses of the north by an eruption of Goths, some centuries before our era. And, whatever truth there may be in this theory, it is, at all events, certain that, as no irruption of any other tribe has taken place into Sweden since the supposed Gothic invasion, the blood of the Goths must be found there in a state of comparative purity. The description of the Germans given by Tacitus might, indeed, be applied to the Swedes of the central and southern parts of the kingdom, who are a tall, robust, fine race of men, with fair complexions, light hair, and blue eyes. But to the N. of 62½° or 63° lat., these characteristics begin to disappear, light hair becoming uncommon, and the complexion being frequently brown, and even tawny.

During the disastrous period from 1800 to 1810 there was a progressive diminution of the pop.; but since then a great change for the better has taken place.

Historical Notice.—The early history of Sweden is obscure, and has little interest. The Swedes being discontented with their king, Albert of Mecklenburg, who had been raised to the throne

in 1365, Margaret, queen of Denmark, styled the Semiramis of the North, a princess of extraordinary talent, availed herself of the opportunity to establish her authority in Sweden. In this object she was completely successful; and by the famous treaty of Calmar, concluded in 1397, the three kingdoms of Denmark, Sweden, and Norway were united under the sway of Margaret. But the Swedes speedily became dissatisfied with this union; and the cruel and tyrannical proceedings of Christian II. excited a rebellion that terminated in the emancipation of Sweden. The famous Gustavus Vasa led the Swedes in their struggle for independence. He hoisted the standard of revolt in 1520, and having entered Stockholm in triumph, in 1523, was raised by the unanimous suffrages of his fellow citizens to the throne. Gustavus, who subsequently introduced the Protestant religion, died in 1560, in the 70th year of his age, and the 40th of his reign. Equally great as a legislator, a warrior, and a politician, he distinguished himself in every station; whether we consider his cool intrepidity and enterprising spirit, his honest integrity and political foresight, his talents for legislation, his attachment to letters and encouragement of learning, his affability, and his solid and enlightened piety. These great qualities, set off by a graceful and majestic person, and heightened by the most commanding eloquence, drew general esteem and admiration; and it may be justly said of him, that the most arbitrary monarch never exercised a more unbounded sway over his vassals, than Gustavus possessed from the voluntary affection of his free-born subjects.

Eric, the son and immediate successor of Gustavus, manifested symptoms of that insanity, which, unhappily, has since been exhibited on more than one occasion by the princes of the house of Vasa. Gustavus Adolphus, grandson of Gustavus Vasa, ascended the throne in 1611. Under this great prince, who was at once an enlightened ruler and the greatest general of his time, the glory and power of Sweden attained to a maximum. At the outset of his reign he was involved in hostilities with the Russians, the Poles, and the Danes, which he terminated with the most triumphant success, having acquired Ingria and Carelia from the Russians, Livonia from the Poles, with sundry valuable territories from the Danes. These successes, and his reputation for ability and disinterestedness, naturally made him the leader of the Protestant party, in the struggle they had to wage against the power and ambition of the house of Austria. And though his glorious and successful career was prematurely terminated by his death at the battle of Lutzen, in 1632, his exertions were mainly instrumental in bringing about that freedom of religious worship, and that equal distribution of power, established by the treaty of Westphalia.

The success that had attended the arms of Sweden under Gustavus, continued to attend them under his daughter Christina, who abdicated the throne in 1654, and his other successors down to Charles XII., who became king in 1697. This extraordinary individual, celebrated alike for his successful exploits and his reverses, well nigh consummated the ruin of Sweden. Inflexible in his resolutions, which were inspired by an ambition that was closely allied to madness, the success that attended his early campaigns made him regard every thing as possible, and precipitated him into the most extravagant projects. But the battle of Pultowa put an end to his career of conquest; reduced him to the condition of a fugitive; and gave Russia a lasting ascendancy over Sweden. Charles XI. and Charles XII. en-

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joyed a nearly absolute authority; but the calamities entailed on the country by the folly, or rather insanity of the latter, led, on the accession of his sister Ulrica Eleonora to the crown, to the enacting of limitations, by which the royal authority was very materially circumscribed. It was, however, again enlarged in 1772.

Gustavus the III., having been assassinated in 1792, was succeeded by Gustavus IV. then a minor. As soon as this prince had been declared major he embroiled himself in hostilities with France, from which Sweden certainly had nothing to fear. He next engaged in a quixotic contest with Russia; and when the latter had overrun Finland, and was threatening an attack on Stockholm, he had the unparalleled folly to reject the assistance of 10,000 English troops who had arrived at Gottenburg. Under these circumstances the dethronement of the king became indispensable to the safety of the state; and this was effected by a bloodless revolution in 1809, when his uncle, who took the title of Charles XIII., was raised to the throne, Prince Christian of Holstein-Augustenburg being, at the same time, declared crown prince and successor. On the premature death of the latter, Marshal Bernadotte, prince of Ponte Corvo, was elected successor to the crown by a diet held at Orebro in 1810, and having accepted the honour, he soon after arrived in Sweden, of which he became king on the death of Charles XIII. in 1818.

There can be no question that the revolution which brought the house of Bernadotte to Sweden has been of vast advantage to that kingdom. The taint of insanity in the princes of the house of Vasa, even had it been less obvious than in the cases of Charles XII. and Gustavus IV., was quite sufficient to justify a change of dynasty.

SWINEMÜNDE, a town of Prussia, in Pomerania, on the E. coast of the island of Usedom, on the middle mouth of the Oder, or rather of the lagoon, or haff, which receives it previously to its falling into the sea. Pop. 6,452 in 1861. Swinemünde is the outport of Stettin; all vessels destined for the latter, that draw more than 7 or 8 ft. water, being obliged to load and unload by means of lighters at Swinemünde. Formerly there were not more than 7 ft. water over the bar at the river's mouth; but it has recently been so much improved by dredging, and the construction of piers, that vessels drawing from 19 to 21 ft. water come to the quays of Swinemünde, and its port is now the best on the whole S. coast of the Baltic.

SWINESHEAD, a par. and market town of England, co. Lincoln, in the fens, 6 m. WSW. Boston, near the East Lincolnshire railway. Area of par. 6,100 acres. Pop. of par. 1,903 in 1861. The sea formerly reached this town, which had a harbour near its present market-place.

SWINTON, a township of England, co. York, W. riding, par. Wath-on-Dearne, 5 m. NNE. Rotherham, on the N. branch of the Midland railway. Pop. 3,190 in 1861. Most of the inhabitants are employed in manufactures of earthenware.

SWITZERLAND (an. *Helvetia*, including part of *Rhætia*), an inland and mountainous country of Central Europe, having Germany on the N. and E., Italy on the S., and France on the W. It lies principally between the 46th and 48th degs. of N. lat., and the 6th and 11th of E. long. Its greatest length N. and W. is 210 m.; greatest breadth N. and S. 140 m.; total area, 15,233 sq. m. It is a republic formed by the union of 22 confederated states, or cantons. The census of Dec. 10, 1860, showed the following population of the 22 cantons:—

| Cantons | Males | Females | Total |
|--------------------|------------------|------------------|------------------|
| Zurich . . . | 130,952 | 136,089 | 267,641 |
| Berne . . . | 234,409 | 234,107 | 468,516 |
| Lucerne . . . | 65,289 | 65,076 | 130,965 |
| Uri . . . | 7,145 | 7,616 | 14,761 |
| Schwytz . . . | 22,251 | 22,942 | 45,193 |
| Unterwald— | | | |
| Upper . . . | 6,446 | 6,953 | 13,399 |
| Lower . . . | 5,579 | 5,982 | 11,561 |
| Glaris . . . | 16,420 | 17,038 | 33,458 |
| Zug . . . | 9,940 | 9,727 | 19,667 |
| Fribourg . . . | 52,927 | 53,043 | 105,970 |
| Soleure . . . | 34,555 | 34,972 | 69,527 |
| Basle— | | | |
| Town . . . | 20,389 | 20,862 | 41,251 |
| Country . . . | 25,770 | 26,003 | 51,773 |
| Schaffhausen . . . | 17,133 | 18,513 | 35,646 |
| Appenzell— | | | |
| Exterior . . . | 24,487 | 24,117 | 48,604 |
| Interior . . . | 5,781 | 6,239 | 12,020 |
| St. Gall . . . | 89,321 | 91,770 | 181,091 |
| Grisons . . . | 43,257 | 47,920 | 91,177 |
| Argovia . . . | 94,032 | 100,548 | 194,600 |
| Thurgovia . . . | 41,766 | 45,581 | 90,347 |
| Tessin . . . | 64,037 | 67,359 | 131,396 |
| Vaud . . . | 109,392 | 104,014 | 213,606 |
| Valais . . . | 45,785 | 45,095 | 90,880 |
| Neuchâtel . . . | 43,522 | 44,325 | 87,847 |
| Geneva . . . | 40,805 | 42,540 | 83,345 |
| Total . . . | 1,254,610 | 1,270,692 | 2,534,242 |

Physical Geography.—Simond has not inaptly remarked, that 'some idea may be formed of the Helvetic geography by comparing the country to a large town, of which the valleys are the streets, and the mountains groups of contiguous houses.' (Travels in Switzerland, i. 141.) Indeed, by far the larger portion of Switzerland consists of mountains, comprising many of the highest summits of the Alps. There is, however, a considerable extent of flat ground in the NW., in the cantons of Fribourg, Berne, and Solothurn. The general distribution of the great Alpine chains in the S. and E. parts of Switzerland has been already noticed in the article ALPS, and need be only briefly indicated here. Two great parallel chains, enclosing the Valais, extend between Mount Blanc, in Savoy, near the SW. boundary of Switzerland, and Mount St. Gothard. To the most southerly of these chains, called the Pennine Alps, belong Mount Rosa, 15,150 ft., and Mount Cervin, or the Matterhorn, 14,836 ft. in height. (Saussure.) To the N. chain, or the Bernese Alps, belong the Finsteraarhorn, 14,085 ft., the Monch, 13,497 ft., and the Jungfrau, 13,717 ft. in height. E. of Mount St. Gothard, which may be considered the central point of the Swiss Alps, the Rhaetian Alps stretch through the Grisons; while, on the N., other chains cover with their ramifications most part of the four Forest cantons (Lucerne, Schwytz, Unterwalden, and Uri). Among the loftiest summits of the Rhaetian Alps are the Dödiberg, 11,765 ft.; and Muschelhorn, 10,807 ft. in height. The Alps of the Forest cantons have several summits, as the Gallenstock and Suostenhorn, the height of which is but little inferior. Most of the preceding chains have a general direction from SW. to NE. But the direction of the main ranges throughout the rest of Switzerland is generally towards the N. or NW., which, also, corresponds with the general slope of the country. In the W., however, beyond the lakes of Neuchâtel and Bienne, the slope of the surface is towards the NE. The mountain-system of this part of Switzerland is that of the Jura; a system composed of several parallel ranges of mountains,

The great rivers Rhine, Rhone, Inn, Ticino, and Doubs (see the names), have their sources in Switzerland; after which the chief river is the Aar. The Aar (see the article) rises at the foot of the Finsteraarhorn, and runs at first E., but afterwards NW. through the lakes of Brienz and Thun, to about 9 m. W. Berne, when it turns NE., and finally falls into the Rhine, near Klingenau, after a course of about 175 m. This river, which drains by far the greater part of Switzerland, receives on the right the Emmen, Wigger, Sur, Reuss, and Limmat, and, on the left, the Simmen, Saane, and Thiele. Unterseen, Thun, Berne, Solothurn, and Aarau are on its banks. The Thur and Birs, tributaries of the Rhine, are the only other streams that deserve notice.

Switzerland has a greater number of lakes than any other tract of country of equal extent in Europe, excepting, perhaps, the grand duchy of Finland. All these lakes are navigable, and remarkable for the depth and purity of their waters, and their great variety of fish. The following is a statement showing the area, height of surface above the sea level, and greatest ascertained depth of the principal Swiss lakes:—

| Lakes | Area in Sq. M. | Height above Sea | Greatest Depth |
|-------------------------|-------------------|---------------------|-------------------|
| | | Ft. | Ft. |
| Geneva, or Lemman . . . | 240 | 1,200 | 1,012 |
| Constance . . . | 200 | 1,255 | 964 |
| Neuchâtel . . . | 90 | 1,320 | 400 |
| Lucerne . . . | 48 | 1,380 | 900 |
| Zurich . . . | .. | 1,362 | 640 |
| Thun . . . | .. | 1,806 | 720 |
| Brienz . . . | .. | 1,902 | 500 |
| Zug . . . | .. | 1,385 | 1,278 |
| Bienne . . . | .. | 1,419 | 400 |
| Wallenstadt . . . | .. | 1,385 | 500 |
| Sempach . . . | .. | 1,748 | .. |

The lakes Maggiore and Lugano are partly, also, in Switzerland. A notice of most of these lakes will be found in this work under their several heads, or those of the different cantons in which they are situated.

Switzerland is almost wholly composed of primary and sedimentary rocks: volcanic formations are rare. The geological constitution of the mountain chains has been already noticed. (ALPS and JURA.) The central portion of the Alps consists of granite, gneiss, porphyry, and other primary rocks, inclosed successively by transition and secondary formations: the Jura is wholly of a remarkable limestone formation. But the region between the Alps and the Jura is occupied with a peculiar formation of green sandstone, called *molasse*, or *nagelflake*, alternating occasionally with limestone and grauwacké, which extends throughout all the lower parts of Switzerland into S. Germany. This deposit has been classed with those of a tertiary kind, and Brogniart and other geologists suspected it to be of a date posterior to the formation of the Paris basin.

The mineral riches of the mountains are but little known or explored, a few iron mines in the Jura being the only ones that deserve notice. There are numerous mineral springs, many of which are resorted to medicinally; and those at Bex, and others in the canton of Basle, furnish considerable quantities of salt. A few insignificant coal beds have been met with; but the remaining mineral products of any value are mostly confined to slate, marble, gypsum, granite, and other kinds of building stone.

The climate is not only dependent on elevation,

posure of the valleys. But, on the whole, Switzerland is a much colder country than its lat. and situation in Europe would appear to warrant. At Berne, the mean annual temp. is about 45° Fah.; at Basle, 46°; and at Geneva (1,200 ft. above the sea), 46½° Fah. The climate in the Alpine regions is believed by some to have become colder in recent times; since the line of perpetual snow (which here varies from about 9,300 to 9,600 ft. above the sea) has certainly descended lower, as compared with a former period; the glaciers have increased in number; and many tracts are now bare, which were formerly covered with forests and pasture-grounds.

The vegetable products of nearly all the different zones of continental Europe are found in Switzerland. The Valais, which has the widest range of vegetation among the Swiss cantons, produces, without culture, nearly 2,000 species of plants, exclusive of 1,000 *cryptogamia*. In respect of its vegetable products, the country may be classed into 7 distinct regions or zones, according to its elevation, as follows:—

| Regions | | Productions |
|--|-------------------|---|
| | Ft. Ft. | |
| Lower Region | — to 2,100 | Limit of the vine. In lower parts of Tessin and Valais, the fig, pomegranate, &c. |
| Forest do. | 2,100 — 3,500 | Limit of the elm. Buckwheat and maize to 2,300 feet. Chestnut ceases at 3,000 ft. |
| Beech do. | 3,500 — 5,300 | Flax, hemp, and barley flourish at 4,000 ft., about which Italian poplar, ash, and wild cherry cease. |
| Pine and Fir do. | 5,300 — 6,800 | Neither potatoes, apples, or pears grown. |
| Lower Alpine do. | 6,800 — 8,500 | Limit of trees of every kind. Includes some good pasture land. |
| Upper do. | 8,500 — snow line | Only shrubs and Alpine plants. |
| Snow Region, above line of perpetual snow. | | <i>Saxifraga oppositifolia</i> , gentians, chrysanthemums, &c. |

There are various exceptions to this table, consequent on difference of lat., position, and other circumstances; but it may be considered as applying to the country generally.

Among the wild animals of Switzerland are the bear, wolf, lynx, wild boar, chamois, ibex, deer, and game of all kinds, the marmot and ermine. The chamois is becoming scarce. The remarkable variety of the spaniel, so useful, and the breed of which is preserved with such care at the *hospice* of St. Bernard, is of Spanish descent, and frequently attains the height of 2 ft. and the length of 6 ft. The birds of prey comprise numerous species of eagles and vultures, one of which latter, the *lammergeyer* (lamb-destroyer), is said to be the largest native bird of Europe. Salmon, trout, and carp inhabit the lakes. There is only one venomous serpent, the *Coluber berus*; but the insect tribes are numerous.

Property and Agriculture.—Switzerland is a country of small proprietors. An estate of 150 or 200 acres, belonging to an individual, worth perhaps from 90*l.* to 100*l.* a year, would be considered large everywhere except in the canton of Tessin, or the Emmenthal, in Berne, and a few other districts, where local customs exist to prevent the too great division of property. Except in certain of these districts the property of individuals is at their death divided in equal shares among their children, without respect to sex or seniority. In certain

cantons, however, as Glarus, landed property cannot be left to any one not a direct descendant, and, failing such heirs, it becomes the property of the government. Indeed, several of the cantons and governments, as that of Berne, and the greater number of the towns, possess a very great extent of landed property. But this is generally apportioned in small lots to the different parties having right to it, or is depastured in common. Switzerland, in fact, is almost wholly a pastoral country: little corn is produced, and the crops are scanty and precarious. Cattle, sheep, and goats constitute the chief riches and dependence of the inhabs. There are, generally speaking, no farmers; each proprietor farming his own small portion of land, and the mountainous tracts belonging to the different communities being depastured in common. No foreigners can become possessors of land, nor can native Jews in several of the cantons.

Switzerland has been estimated to comprise 2,250,000 *morgen* arable land, 900,000 do. land in artificial pastures, 120,000 do. vineyards, and 2,400,000 do. forests. It is only in the canton of Thurgau that corn is produced in any considerable quantity, and even there the home growth does not exceed two-thirds the required supply. In Uri no corn is raised; and in certain parts of the Bernese Oberland wheat is treated as an exotic, and trained carefully over twigs. Rye, oats, and barley are principally cultivated; maize, however, is grown in some parts in considerable quantities. Beans, lentils, potatoes, turnips, pumpkins, flax, hemp, woad, madder, poppies, and tobacco are also grown, but to an insignificant extent. Vines flourish in several of the cantons; as on the shores of the lake of Geneva, Vaud, the Valais, Neuchâtel, and Aargau. The canton of Neuchâtel has been estimated to produce, at an average, about 700,000 galls, 400,000 of which, at least, are sold in the neighbouring cantons. The manufacture of sparkling wine, in imitation of champagne, has of late years been on the increase in Neuchâtel, and from 120,000 to 140,000 bottles are now annually exported. Along the banks of the Lake of Constance, and in the cantons on the Rhine, apple, pear, and cherry orchards are numerous; and cider, perry, kirschwasser, &c. are made in large quantities.

'Vineyard husbandry,' says Mr. Laing (Notes of a Traveller, p. 355), 'is altogether a garden cultivation, in which manual labour, unassisted by animal power, scarcely even by the simplest mechanical contrivance, does every operation; and this gives the character to all their husbandry: hand labour is applied to all crops, such as potatoes, Indian corn, and even common grain crops, more extensively, both in digging and clearing the land, than with us. It is not uncommon to find agricultural villages without a horse; and all cultivation done by the hand, especially where the main article of husbandry is either dairy produce or that of the vineyard.'

Cows, goats, and sheep, as already stated, constitute the principal wealth of the Swiss, the inhabitants of the manufacturing towns excepted; or, to discriminate more accurately, the goats, in a great measure, support the poorer class, while the cows supply the cheese, from which the richer derive their limited wealth. The Swiss peasant is extremely fond of his cow; and to pass the winter without a cow to care for would be to him extremely irksome. The cantons of Glarus, the Grisons, Appenzell, Berne, Tessin, and the Valais, are those most distinguished for the extent and excellence of their pastures. With little exception, all the land not covered with forests, in the cantons of Schwytz and Uri, is used for the pasturage of cattle. The Alpine pastures are

estimated, not by their extent, but by the number of cows they will maintain; in the lower Alps about 3 acres, and in the upper from 10 to 15 acres, being the usual average allowed to each. In several of the W. cantons, these pastures are mostly private property; in the E. they commonly belong to the canton, being apportioned among the different pars., each having its *alp*, or common pasture, for its cows. Each inhab. is entitled to a share of this pasture from June to October. Few individuals, however, have such a number of cows as would repay the labour of attending them in summer on the mountains, properties being in general so small as rarely to be able to maintain above five or six cows in winter, and usually, indeed, not more than half that number. The practice, therefore, is for pars. to hire herdsmen and assistants to take care of the cows in summer when on the mountains, and to make the cheese. The owners of the cows get credit daily for the quantity of milk furnished by their cows; and the produce of the sale of cheese at the end of the season, the expenses being deducted, is divided amongst them in proportion to the total quantity of milk furnished by each. When let, the mountain pastures are rented from the middle of May to the middle of Sept., the cattle being kept in the lowlands during the remaining eight months of the year. The term of the lease on which they are let rarely exceeds a summer. Six or eight goats, or about four calves, sheep, or hogs, are deemed, as to feeding, equivalent to a cow; but a horse is reckoned equal to five or six cows, because he roots up the grass. The Swiss cows are very handsome animals, and so valuable that, even in Switzerland, they fetch about 20*l.* each. They yield more milk than those of Lombardy, where they are in great demand. In some parts of Switzerland, with 40 cows, a cheese of 45 lbs. may be made daily; and in the vicinity of Althorf they make, in the course of 100 days, from the 20th of June, two cheeses daily of 25 lbs. each, from the milk of 18 cows. Cheese appears to have been an important article of export from Switzerland from a remote period. Many varieties are made; the most celebrated of which are those of Schabzieger (see GLARUS), and of Neuchâtel and Gruyère (which see). About 30,000 cwt. Gruyère cheese is said to be annually exported; and from the middle of July to Oct., about 300 horses are employed in transporting Swiss cheeses over Mount Grias.

The total number of cattle in Switzerland has been estimated at 800,000, of which 500,000 are cows. They are principally of two distinct breeds: one of large size, with branching horns, mostly inhabiting the lower parts of the country; and another called the *Oberlander*, a small and inferior species, confined chiefly to the Alps. The best cattle are those of the Simmenthal, the district of Saanen, and the cantons of Fribourg and Solothurn; the last being especially remarkable for the excellence of its oxen. Cows, as well as oxen, are employed for the plough. The horses, though not handsome, are strong and spirited, and well adapted for cavalry and artillery service, for which they are exported to France and elsewhere. Asses and mules are bred in the S. cantons, where they are mostly used for the conveyance of passengers and merchandise. The stock of sheep is estimated at half a million, and of goats at about the same number. There are two varieties of sheep, one native covered with a coarse white wool; and the other a Flemish breed, with fine wool of a dun and yellowish colour. But sheep are not a fa-

Merinos, has been at all attended to. Hogs are of a large but coarse breed, and are principally kept in the Forest cantons.

The urgent necessity of possessing fodder for the support of the cattle during winter makes the collection of grass for hay a work of paramount importance. Hence, wherever it is found, it is carefully collected; and the peasants, having *crampons* on their shoes, to prevent them slipping, gather hay in places inaccessible to cattle. Grass, not three inches high, is sometimes cut three times a year; and in the valleys, the fields are shaven as close as a bowling-green, and all the inequalities clipt as with a pair of scissors. In Switzerland, as in Norway, the art of mowing seems to be carried to its highest perfection, and no where is so much skill and attention displayed in harvesting corn and hay. But arable and meadow cultivation are both in a backward state, owing principally to the pertinacity with which the people reject innovations, and cling to old and defective methods of husbandry. On arable lands fallows take place every 4th or 5th year, and the culture of turnips for cattle feeding is unknown. Great attention is, however, paid to the collection of both solid and liquid manure, but they are not very judiciously employed. The wages of agricultural labour are low; but, on the whole, the rural pop. may be considered well off.

The diet of the Swiss consists more of porridge than is general in England, and much more milk and cheese is consumed. In other respects, wine and cider being substituted for beer, the catalogue of articles of food is much the same among the peasantry in both countries. The houses inhabited by the rural pop. are mostly of wood, but capacious, and furnished generally with all the articles required for daily use. The herdsmen who tend the cattle in the Alpine pastures are lodged in *châlets*, or rude log huts formed of the trunks of pines, and having rarely any furniture, except the necessary dairy utensils.

Chamois hunting, fishing in the lakes, and boat building employ some of the inhabs. in the intervals of agricultural industry, but to no great extent. A great number of Swiss emigrate to foreign countries, where they act as valets, and embark in various trades, especially those of confectioners and bakers; always returning, however, to spend or invest their gains in their native land. The Swiss have also been for centuries the *condottieri* of Europe; and have always been ready to barter their blood and bravery, or to enter into the military service of any sovereign or republic that chose to hire their services, and to support any cause, however unprincipled or unjust. There were formerly numerous Swiss regiments in the service of France and Spain; and they are still employed by the Pope. The foreign mercenaries are extremely economical; and such of them as survive return home with all that they have been able to amass.

Manufactures.—Notwithstanding the geographical disadvantages of Switzerland, the inhabs. have carried some branches of manufacturing industry to a considerable state of advancement. Various parts of the country have been noted, since the 13th century, for their manufactures; and they are now more extensively carried on than ever. Most part of the agricultural inhabs. are almost wholly occupied during winter at the loom, or in other branches of manufacturing industry; and they also engage in them during the evenings throughout the year, and when their little patch of land does not require their attention.

the weavers being furnished with the warp and wool by the manufacturers, to whom they return the woven goods. A line drawn through Switzerland in a NNE. direction, across the canton of Fribourg, and through the Saanen, pretty accurately divides the German from the French pop., each portion of which presents in its manufactures some distinguishing characteristic of its origin. In the French cantons the manufacture of watches, musical boxes, and jewellery are most extensively carried on; while cotton and silk fabrics are the principal employment of the inhabs. of the E. and NE. cantons. In the Grisons, and the Italian cantons S. of the Swiss Alps, there are few, if any, manufactures. The principal manufacturing cantons of German Switzerland are Appenzell (outer Rhodes), St. Gall, Thurgau, Zurich, Aargau, and Basle; and in the French part of the country those of Geneva and Neuchâtel. Appenzell and St. Gall are the principal seats of the cotton trade. Raw cotton is imported from England, France, Holland, and Trieste; cotton twist of the higher numbers being almost wholly brought from England. Cotton printing is conducted to some extent in Neuchâtel, where the quality of the water, and perhaps other physical circumstances, conspire to produce brilliant and beautiful colours, in which, indeed, consists the whole excellence of the Swiss goods. The census returns of 1860 furnish some details as to the number of persons engaged in the various manufactures. In the canton of Basle, the manufacture of silk ribbons, to the annual value of 1,400,000*l.*, occupies 6,000 persons; and in the canton of Zurich silk stuffs to the value of 1,600,000*l.* are made by 12,000 operatives. The manufacture of watches and jewellery in the cantons of Neuchâtel, Geneva, Vaud, Berne, and Soleure occupies 36,000 workmen, who produce annually 500,000 watches—three-sevenths of the quantity of gold and four-sevenths of silver—valued at 1,800,000*l.* In the cantons of St. Gall and Appenzell, 6,000 workers make 400,000*l.* of embroidery annually. The printing and dyeing factories of Glaris turn out goods to the value of 6,000*l.* per annum. The manufacture of cotton goods occupies upwards of 1,000,000 spindles, 4,000 looms, and 20,000 operatives, besides 38,000 hand-loom weavers. Straw-plaiting, in the cantons of Argovia, Lucerne, and Basle, employs 30,000 persons, and machine building, principally at Zurich, 6,000. In many of these occupations, agricultural labour is combined with factory work.

The foundation of Swiss manufactures is laid in the peculiar distribution of property in the country, and the necessities of the inhab. Most families have a small patch of land; but, as its cultivation does not occupy half their time, and is besides unable to afford them more than a scanty supply of the most indispensable necessities, they naturally endeavour to eke out their limited means by engaging in weaving and such like employments. And inasmuch as all they make in these employments is so much clear gain, so much added to the fund on which they must otherwise subsist, it is plain they can afford to work at the lowest possible rate of wages. The Swiss, from their situation in the centre of Europe, are obliged to pay an enhanced price for their cotton and yarn; so that their whole advantage consists in their being able to reduce wages to next to nothing without being driven from the business.

The influence of the circumstances now alluded to has been increased by the wise and liberal policy followed by the government. Switzerland is a country in which the great principles of free labour at home and free intercourse with foreign-

ers, have been fully carried into practice. No restrictions exist upon the pursuit of any branch of trade. Industry has been left to itself. Wealth has not been diverted, by legislative interference, from its own natural tendencies. There has been no foolish struggle encouraged by the government between the protected monopoly of the few, and the unprotected interests of the many. Two millions of men have made, under every disadvantage, the experiment of free trade as a system. The consumer has been allowed to go to the cheapest market, the producer to the dearest; and activity is everywhere visible alike in the trading and agricultural districts. The general prosperity is also favoured by other extraneous circumstances: land is, for the most part, released from tithes and taxes, and the people subjected to very trifling fiscal burdens. In many of the cantons there is no national debt; and some of them, indeed, nearly discharge the expenses of their government out of the interest of the capital accumulated from the surplus revenues of previous years.

Trade.—The federal custom-house returns classify all imports and exports under three chief headings, namely, 'live stock,' '*ad valorem* goods,' and 'goods taxed per quintal.' According to this classification, the import and export trade of the Confederation 1862 and 1863, was as follows:—

| Importation | | 1863 | 1862 |
|--|----------|------------|------------|
| Live Stock | head | 815,618 | 812,607 |
| Agricultural Instruments, Carts and Railway Carriages for Travellers, and Merchandise, <i>ad valorem</i> | francs | 584,778 | 488,232 |
| Goods taxed per quintal, including loads reduced to quintals | quintals | 14,538,694 | 14,180,728 |
| Exportation | | 1863 | 1862 |
| Live Stock | head | 101,580 | 111,550 |
| Wood and Coal, <i>ad valorem</i> | frs. | 7,494,326 | 5,839,249 |
| Goods, per load & quintal | quin. | 2,077,543 | 2,058,560 |

The direct trade of Switzerland with its four neighbours, France, the states of the Zollverein, Italy, and Austria, was as follows in the year 1863:

| | Head of Cattle and other Animals | Ad valorem | Quintals |
|--------------------|----------------------------------|------------|-----------|
| France— | | | |
| Imports | 43,017 | 4,358,827 | 7,424,850 |
| Exports | 41,351 | | 668,502 |
| Transit Trade . . | 4,109 | | 281,320 |
| Total | 88,477 | 4,358,827 | 8,374,672 |
| German Zollverein— | | | |
| Imports | 67,379 | 172,495 | 6,662,472 |
| Exports | 20,290 | | 853,785 |
| Transit Trade . . | 23,627 | | 615,042 |
| Total | 111,496 | 172,495 | 8,091,299 |
| Italy— | | | |
| Imports | 77,986 | 1,300,203 | 1,434,696 |
| Exports | 44,845 | | 431,765 |
| Transit Trade . . | 63,863 | | 398,559 |
| Total | 186,694 | 1,300,203 | 2,265,020 |
| Austria— | | | |
| Imports | 24,225 | 7,724 | 366,404 |
| Exports | 5,064 | | 64,162 |
| Transit Trade . . | 6,089 | | 34,493 |
| Total | 35,378 | 7,724 | 465,060 |

Switzerland enjoys a large share of the transit trade between Germany and Italy, Austria, and France. The roads, which are maintained by the cantonal governments, are everywhere in good order, and, in addition to them, a very complete network of railways has been established within the last ten years. The progress of this railway system is shown in the following table:—

| Years | Total Length of Lines conceded | | Length of Lines opened | |
|-------|--------------------------------|---------------|------------------------|---------------|
| | Lieues | English Miles | Lieues | English Miles |
| 1855 | 244 | 732 | 43 | 129 |
| 1856 | 336 | 1,008 | 70 | 210 |
| 1857 | 383 | 1,149 | 107 | 321 |
| 1858 | 392 | 1,176 | 146 | 438 |
| 1859 | 357 | 1,071 | 196 | 588 |
| 1860 | 350 | 1,050 | 220 | 660 |

Government.—The 22 cantons are united on equal terms in a confederation for mutual defence; but, in most other respects, each has its own independent internal administration. The government is wholly republican in every canton. Before 1831, when important reforms took place in the Swiss constitutions, the cantons were divided into aristocratic and democratic; but at present the government is more or less democratic in all. In Uri, Schwytz, Unterwalden, Glarus, Zug, and Appenzell, the functions of legislation and sovereignty are vested in the *lands gemeinde*, or general assembly of the inhabs., in which every citizen of full age, without any property qualification has a vote. In the other cantons the legislative power is delegated to the *landrath*, or council of representatives, elected in the primitive or general assembly of the inhabs., the elective suffrage in which is universal, or nearly so. And in some of these cantons, as St. Gall and Basle (country), the primitive assemblies have a *veto* on the decisions of their grand council in all matters of an organic character; while in others the people at large have the right to revise their constitution in primitive assembly after a certain number of years. The grand council, where it exists, elects the petty council, or executive power, at the head of which is the burgomaster or *avoyer* of the canton; in other cantons the *landamman*, or *landshauptmann*, is chosen by the general assembly.

The form of the general government, or the federal constitution, has also, since 1848, undergone great modifications. A contest was continued for a lengthened period between those who wished to preserve for individual cantons the greatest amount of free action, and those who wished to strengthen the general government, and to render its authority paramount. It would be irksome to enter into any details with respect to this contest. Suffice it to say, that after a great deal of acrimonious discussion, which led ultimately to a civil war, the party favourable to a more intimate union of the different cantons gained a decided preponderance. In consequence a new constitution was proclaimed, on the 12th September, 1848. Under this new arrangement the federal assembly consists of two divisions, a national assembly, and a council of state, or senate. The first consists of deputies (111 in all) from each canton, in the proportion of a deputy to every 20,000 inhabs.; and the second, or senate, consists of 44 mems., or 2 for each canton. The federal assembly chooses from among its members a national council of 7 individuals, which is, in fact, the executive government. But the powers committed to this council are comparatively limited, the federal assembly reserving to itself

include all sorts of treaties and alliances, to nominate diplomatic agents, to fix the amount of the military force, and to regulate the customs and transit duties, and other taxes imposed for public purposes, the business of the post-office, of internal communication, and the mint.

Under the old system there was no proper judicial tribunal for the decision of disputed questions between different cantons, so that when they occurred they had always to be submitted to arbitration; the diet being authorised, in the event of the arbiters not agreeing, to appoint an umpire. Under the new constitution this objectionable system has been so far amended, that a tribunal has been constituted which determines all questions between the cantons and the Confederation, between one canton and another, and between cantons and individuals. But unfortunately the judges in this tribunal, who are named by the assembly, are not appointed for life, or during good behaviour, but for 3 years only. They are really, therefore, the mere nominees of the party which happens to have at the time a majority in the assembly, so that in political matters but little weight can be attached to their decisions.

Formerly the diet met alternately in Berne, Zurich, and Lucerne, two years in each, but now it meets in Berne only. Religious differences had a great deal to do in bringing about the late changes; and it is a fundamental principle in the new order of things that the expulsion of the Jesuits shall be maintained, and monasteries be everywhere suppressed.

The revenue of the Confederation consists chiefly of a money contingent contributed by the different cantons proportionally to their military contingent, and of the tolls on imports collected by the frontier cantons, and accounted for by them to the assembly. It amounted, in 1863, to 20,621,559 francs, or 824,862*l.*, while the expenditure, in the same year, was 20,322,324 francs, or 812,893*l.* The number of men each canton furnishes to the federal army varies according to its amount of pop. and resources. The total armed force of the Confederation, according to the scale adopted in 1840, amounts to 64,000 men, viz. 61,800 infantry, 5,800 artillery, 5,700 cavalry, and 700 engineers. Switzerland has, however, no standing army in the strict sense of the word. It is only a militia force, in which every male Swiss must serve for a certain number of years, holding himself at all times ready if called on for cantonal or federal service. Every two years a federal camp is formed for exercise; and at Thun, in the canton of Berne, a school for the instruction of officers is held for two months each year.

Each canton has its own code of laws, which are, in general, similar to those prevalent in Germany. In some cantons, as Fribourg, Schwytz, &c., the Carolina, or penal code of Charles V., was in force down to a late period, trials were not public, and juries did not exist; but in these respects some considerable improvements have latterly been effected. The prisons in most parts of the country are in a bad state. In Berne, however, and especially in the French cantons, improved and benevolent systems of discipline have been adopted, and at Geneva the panoptic penitentiary system of Bentham has been introduced.

Religion.—At the census of 1860, there were in the republic 1,483,498 Protestants, and 1,040,534 Roman Catholics. Besides the Catholic and Protestant pop. there are about 600 Anabaptists, and 1,800 Jews. The latter enjoy no political rights. The Catholic are much more numerous than the Protestant clergy, comprising altogether about

comes of many of whom are very considerable. There are four Rom. Cath. dioceses; Chur and St. Gall, Basle, Lausanne, and Sion; the bishops of which are suffragans of the archbishop of Milan. Tessin is in the diocese of the bishop of Como. The government of the Protestant church is considered a branch of the department of public instruction, and as such belongs to the magistrates in the various cantons.

The Swiss Protestant church was originally Calvinistic in principle, and Presbyterian in its form. But the zeal by which the Swiss Protestants were formerly distinguished appears wholly evaporated; and it is a singular and not easily explained fact, that, in the Protestant cantons, religion is, at present, less cared for, and has less influence, than anywhere else in Europe. The people are not infidels; but are wholly indifferent to, and, in fact, careless about religion. This is the result of a variety of causes; and is principally, perhaps, to be ascribed to something defective in the system under which the clergy are appointed, and in their training. It is right, however, to state that, notwithstanding the neglect of religion, the Swiss Protestants are eminently moral in their habits; and are honest and upright in their dealings.

Education.—Public education is very widely diffused. Parents must give their children some sort of education, from the age of 5 to that of 8 years; or their neglect may be punished by fine, and, in some cases, even by imprisonment. The obstinate refusal of parents to send their children to school is, however, a rare case; because no child becomes able to exercise the rights of citizenship, or is taken into service of any kind, without having first received the sacrament, which is administered to those only who have attained a certain degree of instruction. In every district there are primary schools, in which the elements of education, geography, history, and singing are taught; and secondary schools for youths of from 12 to 15, in which instruction is given in ancient and modern languages, geometry, natural history, the fine arts, music, and calligraphy. In both these schools the rich and the poor are educated together, the latter being admitted gratuitously. There are normal schools in several of the cantons for the instruction of schoolmasters; who are subsequently paid, by the cantons, salaries varying usually from 10*l.* to 50*l.* a year. Sunday schools exist in several cantons, and Lancastrian schools in Geneva and Vaud. There are superior gymnasia in all the chief towns. Basel has a university, which was formerly much frequented; and since 1832 universities have been established in Berne and Zurich. In the principal towns there are good libraries and literary associations.

Social Condition.—Every parish or community is obliged to support its own poor, who become chargeable on their own commune. But only those having the rights of citizenship have a right to eleemosynary support, the privilege not being extended to others, though borne in the commune. In most instances, the communes have poor-funds administered independently of the cantonal government; but if these are not found sufficient, a poor-rate is levied. This rate is always limited, being in Zurich no more than about 2½*d.* a year from each individual. The number of poor appears to be on the decrease.

'The peculiar feature in the condition of the Swiss pop.' says an English traveller already quoted (Laing's Notes, p. 336), 'the great charm of Switzerland, next to its natural scenery, is the air of well-being, the neatness, the sense of property imprinted on the people, their dwellings,

their plots of land. They have a kind of Robinson Crusoe industry about their houses and little properties; they are perpetually building, repairing, altering, or improving something about their tenements. The spirit of the proprietor is not to be mistaken in all that one sees in Switzerland. Some cottages, for instance, are adorned with long texts from Scripture painted on or burnt into the wood in front over the door; others, especially in the Simmenthal and Haslethal, with the pedigree of the builder and owner. These show, sometimes, that the property has been held for 200 years by the same family. None of the women are exempt from field-work, even in the families of very substantial peasant proprietors, whose houses are furnished as well as any country houses with us. All work as regularly as the poorest male individual. The land, however, being their own, they have a choice of work, and the hard work is generally done by the men. The felling and bringing home wood for fuel; the mowing grass generally, but not always; the carrying out manure on their back; the handling horses and cows, digging, and such heavy labour, is man's work: the binding the vine to the pole with a straw, which is done three times in the course of its growth; the making the hay, the pruning the vine, twitching off the superfluous leaves and tendrils,—these lighter, yet necessary jobs to be done about vineyards or orchards, form the women's work. But females, both in France and Switzerland, appear to have a far more important rôle in the family, among the lower and middle classes, than with us. The female, although not exempt from out-door work, and even hard work, undertakes the thinking and managing department in the family affairs, and the husband is but the executive officer. The female is, in fact, very remarkably superior in manners, habits, tact, and intelligence to the husband, in almost every family of the middle or lower classes in Switzerland. One is surprised to see the wife of such good, even genteel, manners and sound sense, and altogether such a superior person to her station, and the husband very often a mere lout. The hen is the better bird all over Switzerland.'

The population of Switzerland is very unequally divided between the several cantons, as will be seen from the subjoined table:—

| Cantons | Area in Square Miles | Population per Sq. Mile |
|--------------------------|----------------------|-------------------------|
| Zurich . . . | 685.8 | 365.8 |
| Berne . . . | 2,561.5 | 178.8 |
| Lucerne . . . | 587.4 | 226.1 |
| Schwytz . . . | 398.3 | 180.5 |
| Uri . . . | 420.8 | 34.4 |
| Unterwald—Upper . . . | 262.8 | 95.6 |
| Lower . . . | | |
| Glaris . . . | 279.8 | 107.9 |
| Zug . . . | 85.4 | 204.4 |
| Fribourg . . . | 563.9 | 177.1 |
| Soleure . . . | 254.6 | 273.6 |
| Basle—City . . . | 184.6 | 420.2 |
| Country . . . | | |
| Schaffhausen . . . | 119.7 | 294.9 |
| Appenzell—Exterior . . . | 152.8 | 359.3 |
| Interior . . . | | |
| St. Gall . . . | 747.7 | 228.2 |
| Grisons . . . | 2,968.0 | 30.2 |
| Argovia . . . | 502.4 | 397.7 |
| Thurgovia . . . | 268.3 | 368.6 |
| Tessin . . . | 1,034.7 | 113.8 |
| Vaud . . . | 1,181.9 | 168.8 |
| Valais . . . | 1,661.6 | 50.5 |
| Neuchâtel . . . | 280.2 | 252.5 |
| Geneva . . . | 91.3 | 702.5 |
| Total . . . | 15,233.0 | 157.2 |

In dividing the people of Switzerland according to their language, nearly 1,500,000 speak a German dialect, 450,000 French, and about 125,000 a corrupt Italian: in a large part of the Grisons, the Romansch tongue, bearing a very close analogy to the ancient Latin, is spoken in several dialects. The distinctions of language are the principal among the Swiss: there are few physical differences in the inhabs. of the different parts of the country, except that the natives of the mountainous parts are the more muscular and active. The Swiss are unquestionably a brave people devoted to their home and their freedom, for the maintenance of which they have often made great sacrifices and exertions. The situation in which they are placed, their scanty means of subsistence, the necessity of husbanding their resources, and the difficulty of increasing them, have made them sober, industrious, and economical. However, though attached to their country, they have no relish for its magnificent natural beauties; and though an honest, laborious, prudent, and, on the whole, respectable people, they have little that is amiable or attractive in their character.

History.—After the conquest of Helvetia by Julius Cæsar, the Romans founded in it several flourishing cities, which were afterwards destroyed by the barbarians. On the decline of the Roman empire, it successively formed a part of the kingdom of Burgundy and the dominions of the Merovingian and Carolingian kings; while the E. part of Switzerland became first subject to the Allemanni, and subsequently it was wholly included in the German empire under Conrad II. in 1037.

The house of Hapsburg had, from an early period, the supremacy over all the E. part of Switzerland; and it preserved its ascendancy till about 1307, when Uri, Schwytz, and Unterwalden entered into a confederacy for mutual aid against Austria, which compact was confirmed after the defeat of Leopold duke of Austria, at the battle of Morgarten, in 1315. From 1332 to 1353, Lucerne, Zurich, Glarus, Zug, and Berne joined the confederation. Aargau was conquered from Austria in 1415; the abbey and town of St. Gall joined the other cantons in 1451-54; Thurgau was taken in 1460; Fribourg and Solothurn admitted in 1481; the Grisons in 1497; Basle and Schaffhausen in 1501, and Appenzell in 1513. About this time Tessin was conquered from the Milanese, and Vaud was taken from Savoy by the Bernese, in 1560. The remaining cantons were not finally united to the confederation till the time of Napoleon; and the compact, by which all were placed on a perfect equality, only dates from the peace of 1814.

SYDNEY, a town of E. Australia, the cap. of the British colony of New South Wales, on a cove on the S. side of the magnificent bay, or inlet of the sea, called Port Jackson, about 7 m. from its mouth. Pop. of town, 56,470, and of town and suburbs, 93,202 in 1861. The town stands principally on two hilly necks of land bounding Sydney Cove on the E. and W., and on the intervening flat ground for nearly 2 m. inland, and would appear, from the extent it covers, to contain a much larger pop. than really belongs to it; but the houses in many parts are not more than one story in height, and are generally surrounded by gardens. In the older part of Sydney, termed 'the Rocks,' the streets are comparatively irregular, for, owing to a want of attention at first, they were laid out, and the houses built, according to the views of individuals, without any fixed or regular plan. But latterly this defect has been to a considerable degree remedied in the old streets, and the new ones are systematically laid out. On

rise in successive terraces. The E. peninsula is almost wholly occupied by the government domain. The new government house, an extensive structure in the Elizabethan style, cost 50,000*l.* The barracks were till lately in the centre of the town, but owing to the frequent squabbles that took place between the troops and the citizens, the barracks have been removed to the Surrey hills, about 2½ m. from the town. The extensive barracks and hospitals that were formerly required for the service of the convicts, have been appropriated partly for the temporary accommodation of immigrants, and partly for other purposes. Among the other public buildings are the court-house, police and commissariat offices, custom-house, and new gaol. Sydney has a cathedral and several English churches, a Rom. Cath. chapel, a handsome Gothic building, with chapels for Presbyterians, Wesleyans, and other dissenters. Among its educational institutions are the Australian College and Sydney College, which furnish superior instruction in classics, mathematics, and English literature; a normal institution, with Episcopalian, Presbyterian, and Rom. Cath. schools.

Sydney is admirably adapted for the capital of a great trading colony. Port Jackson is one of the finest natural basins in the world. It stretches about 15 m. into the country, and has numerous creeks and bays: the anchorage is everywhere excellent, and ships are protected from every wind. The entrance to this fine bay is between two gigantic cliffs, not quite 2 m. apart. On the most southerly, in lat. 33° 51' 30" S., long. 151° 16' 30" E., a lighthouse has been erected, the lantern of which is elevated 67 ft. above the ground, and about 345 ft. above the sea. It is navigable for ships of any burden to the distance of 15 m. from its entrance, or 7 m. above Sydney, up what is called the Paramatta river. Ships come close up to the wharfs and stores of the town, their cargoes being hoisted from the ship's hold into the warehouses. Sydney is consequently the emporium of all the settlements in this part of Australia, and has a very extensive trade. Previously to the discovery of the gold fields, wool was the great article of export, and, though it is now far surpassed by gold, it continues to be of great importance. There entered the port, in 1862, 961 vessels, of a total burden of 813,302 tons; and there cleared, in the same year, 835 vessels, of 275,129 tons burden.

The great articles of importation are wines and spirits, manufactured goods and apparel of all sorts, hardware, earthenware, saddlery, books and stationery, and carriages from England; tea from China; and sugar from the Mauritius and Calcutta. The value of the imports into Sydney exceeded for a lengthened period the value of the exports; the excess of the former being, in fact, the amount of the remittances from Great Britain on account of the convict establishment. But since the latter was suppressed, the value of the exports has been equal to that of the imports.

SYLHET, a district of British India, presid. Bengal, beyond the Brahmaputra, and chiefly between the 24th and 25th degs. of N. lat. and the 91st and 93rd of E. long., having N. the territory of the Cosseahs and Jynteah, E. Cachar, S. Tipperah, and W. the district of Myennusing and Dacca. Area, 3,532 sq. m. Pop. estimated at 1,200,000. It is one of the most densely peopled portions of the British dominions in the East. Its borders are mountainous, and on the E. and S. the mountains rise to the height of about 6,000 ft.; but its central part, which is flat and intersected by the Barah and a great many other rivers tributary to the Brahmaputra, is covered with rice fields, that

ton and sugar are raised in considerable quantities; and Sylhet produces the finest oranges and limes throughout British India: they are grown in extensive plantations, or rather forests, and exported to a great extent. Chunam, wax, aloe wood, wild silk, and elephants are among the other chief products; and coal of a very fair quality has been somewhat recently discovered. Boat-building is pursued pretty extensively, and Sylhet shields are articles much prized by the natives of Hindostan. The land is, in general, very much divided. Mohammedans are numerous in this district. Sylhet, its chief town, and the residence of the principal authorities, is on the Soormah, in lat. $24^{\circ} 55' N.$, long. $91^{\circ} 40' E.$

SYRA (an. *Scyros*), an island belonging to Greece, in the group called the N. Cyclades; the port of Syra, on the E. side of the island, 15 m. W. from the greater Delos, being in lat. $37^{\circ} 26' 30'' N.$, long. $24^{\circ} 55' E.$ It is about 10 m. in length, N. and S., and 5 m. in breadth. Though rugged and not very fruitful, it is well cultivated; and the pop., which in 1825 was not supposed to exceed 4,500, is now estimated at nearly 40,000. It is indebted for this extraordinary increase of pop. to the convenience and excellence of its port and its central situation, which have made it a considerable commercial entrepôt. Most part of the trade that formerly centred at Scio is now carried on here; and the island has not only received numerous immigrants from that island, but also from many other parts of Greece. Great Britain and most European powers have consuls in Syra; and it also is the principal seat of the Protestant missionaries to the Levant. The town, which is in great part old, has several new streets and houses, and has an appearance of great bustle and animation.

Pherycides, one of the most celebrated of the ancient Greek philosophers, the disciple of Pittacus, and the master of Pythagoras, was a native of this island.

SYRACUSE (an. *Syracusa*), a famous city of Italy, island of Sicily, prov. Noto, cap. of a dist. and cant., on the E. coast of the island, 31 m. SSE. Catania. Pop. 19,401 in 1862. The modern city is wholly confined to that small portion of the site of the ancient city included in the island of Ortygia, separated from the mainland by a fosse, and projecting S. in the shape of a narrow peninsula, inclosing between it and the mainland the noble basin called the Great Harbour, which its security and the facility of its access render one of the best ports in the Mediterranean. Outside the peninsula is the Little Harbour (an. *Trogilus*). Syracuse is pretty strongly fortified, being defended by a bastioned wall and other works. The port is protected by the castle of Maniaces, near the S. extremity of the peninsula. The modern city has little except its ancient renown, its noble harbour, and the extreme beauty of its situation to recommend it. The temple of Minerva has been converted into the cathedral; but the portico and front, having been destroyed by an earthquake, are modern, and in bad taste. It has several other churches, with numerous convents, a seminary for the clergy, a college for general studies, a hospital, a lazaretto, extensive barracks, a museum, and a public library. There are some remains of the temple of Diana, but they are unimportant. The famous fountain of Arethusa (see ARETHUSA), the great glory of ancient Syracuse, is now defiled by the admixture of the sea, and is degraded into a sort of washing-tub for the poorer class of townswomen. The commerce of the city, the principal source of its wealth in antiquity, is also quite inconsiderable;

oil, corn, fruits, hemp, and saltpetre. 'Its streets,' says a recent traveller, 'are narrow and dirty; its nobles poor; its lower orders ignorant, superstitious, idle, and addicted to festivals. Much of its fertile land is become a pestilential marsh; and that commerce which once filled the finest port in Europe with the vessels of Italy, Rhodes, Alexandria, Carthage, and every other maritime power, is now confined to a petty coasting trade. Such is modern Syracuse! Yet the sky which canopies it is still brilliant and serene; the golden grain is still ready to spring almost spontaneously from its fields; the azure waves still beat against its walls to send its navies over the main; nature is still prompt to pour forth her bounties with a prodigal hand: but man, alas! is changed; his liberty is lost; and with that the genius of a nation rises, sinks, and is extinguished.'

The ancient Syracuse was founded by a colony from Corinth, about anno 736 B.C. Its advantageous situation, and the commercial enterprising spirit of its inhabitants, speedily raised it to the highest distinction. Cicero calls it the greatest and most beautiful of Greek cities:—'*Urbem Syracusarum maximam esse Græcarum urbium, pulcherrimamque omnium, sæpe audistis.*' (In Verrem, lib. iv. cap. 52.) As soon as it had outgrown the limits of the original city, which, like the modern, was confined within the island of Ortygia, it began to extend towards the N., covering, when in its zenith, a large triangular space, which, rising precipitously from the sea on the one hand, and the plains to the W. on the other, admitted of being easily fortified. This new city terminated on the N. in the hill of Epipolæ, which, however, was not included within it till the time of the elder Dionysius, who constructed at that point the fortress of Hexapylon, the vast ruins of which still attest its former strength and importance. The city was defended partly by lines of rocks, and partly by strong walls. Its circuit is estimated by Strabo at 180 stadia, or about 20 Eng. m.; and supposing that the sinuosities of the walls were followed, this statement is probably not very wide of the mark. Among the advantages of the situation chosen for the site of the new city was its inexhaustible supplies of fine freestone; which, though soft and easily wrought in the quarry, became, by exposure to the air, sufficiently hard.

The space included within the walls of the new or N. city comprised, 1. the quarter of Acradina, the largest and most populous of the whole, adjoining the island of Ortygia, having E. the sea: it contained the temple of Olympian Jupiter, the forum, the prytæum, &c.; 2. the quarter called Tyche, from its temple to fortune (Τύχη), lying NW. from Acradina; and 3. the quarter called Neapolis, or the New City, from its being the last built: this, which was the most westerly portion of the city, and was bounded in part by the Great Port, contained a spacious theatre, cut in the rock, upon the slope of a hill; and two temples, one dedicated to Ceres, and one to Libera or Proserpine. (Cicero, *ubi supra.*)

Among the existing remains of Syracuse, the most extraordinary, perhaps, are the *latomiæ*, or prisons. These are immense excavations cut in the solid rock to a great depth, with steep overhanging sides, whence all egress is impossible. They appear originally to have been quarries (whence their name), and to have been subsequently formed into prisons. They have been forcibly and admirably described by Cicero:—'*Latomiæ Syracusanæ omnes audistis, plerique nostis; opus est ingens, magnificum, regum ac tyrannorum; totum est ex saxo in mirandam altitudinem depresso*

sum ad exitus, nihil tam septum undique, nihil tam tutum ad custodius, nec fieri nec cogitari potest. (In Verrem, lib. v. cap. 27.) In the NW. angle of the *latomia* of the Neapolis is the famous cavern, called the Ear of Dionysius. It runs into the heart of the hill, in the form of the letter S, the sides being chiselled quite smooth, and the roof gradually narrowing to a point, along which runs a groove, which collected, as is supposed, the sounds of the voices of the prisoners. It derives its name from the popular belief that Dionysius was accustomed to incarcerate in it those he supposed inimical to his authority; and that, by applying his ear to one end of the groove, and listening to their conversation, he ascertained whether his suspicions were well-founded. There appears, however, to be little or no foundation for this story; though, from the care bestowed on its construction, it must evidently have been intended for some special purpose.

The *latomia*, on the hill of Epipolæ, were selected as the place of confinement for the miserable remains of the vast armament fitted out by Athens for the reduction of Syracuse. About 7,000 men are said to have been shut up in this prison, exposed alternately to the heats of a vertical sun, rendered more intolerable by its reflection from the surrounding rocks, and to the chills of the evenings, with insufficient supplies of food, and without any means of preserving cleanliness, or even of escaping from the contact of the sick and dead. Every hardship was accumulated on the heads of the unhappy sufferers, till at length, after an interval of above two months, most part of those that survived were brought forth to be sold as slaves. (Thucyd., lib. vii. *ad finem*.) The *latomia* were also used by Verres for the imprisonment, not merely of Syracusan, but of Roman citizens.

The catacombs, in the Acradina, are of vast extent, and may be truly called a city of the dead. They consist of a principal and several smaller streets, all excavated in the rock, with deep contiguous recesses on each side, containing cells for the reception of the dead. Various theories have been formed as to the era of the formation of these vast subterranean excavations, which, no doubt, belong to a very remote antiquity.

On the whole, however, considering the great extent of the city, and the number and magnificence of its public buildings, the continental portion of Syracuse, with the exception of the *latomia* and catacombs, and some remains of the walls and of aqueducts, has very few monuments of antiquity of which to boast. Swinburne (ii. 334) and Hughes (i. 82) express their astonishment at the almost total disappearance of all vestiges of the great public and other buildings, with which the city was once filled. This, however, is not inexplicable; the sea has undermined a portion of the walls of Acradina, and the perishable nature of the stone of which the city was built, added to the influence of earthquakes, the ravages of war and of barbarians, and the accumulation of rubbish, have made Syracuse, like Carthage, *non agnoscentia propriis ruinis*. Among the ruins of some baths, excavated in 1810, was found the torso of a Venus, worthy of the best age of the art, and now the pride of the museum.

Various estimates have been formed of the pop. of Syracuse when in the summit of its prosperity. These, however, are mostly all exaggerated, and entitled to but little attention. Thucydides says that it was nowise inferior to Athens (lib. vii. p. 503); and that it was a very large and splendid

spaces and public buildings within its walls, its pop. could not be in any degree proportioned to what would be contained in a modern city of the same size. Probably it may have amounted to 200,000, or, at most, 250,000; though, if anything, we suspect that this estimate is beyond the mark.

Syracuse appears at first to have been under a republican government; but it subsequently became subject to kings or tyrants, of whom Gelon and Hieron were among the earliest and most celebrated, the triumph of the latter in the chariot-race at the Olympic games having been the subject of one of Pindar's noble odes. But Thrasybulus, the younger brother of the latter, having been expelled the city, the republican form of government was restored.

The Syracusans having been involved, during the course of the Peloponnesian war, in contests with other cities of Sicily, the Athenians sent a fleet to the assistance of the latter; and, from less to more, Athens became so much mixed up with Sicilian affairs, that she determined to bring them to a satisfactory conclusion, by undertaking the conquest of Syracuse itself. The greatest exertions were made to effect this grand object; the zeal of the public was supported by the zeal of private individuals; and the armament fitted out by Athens for the reduction of Syracuse is universally admitted to have been the greatest and most splendid ever sent forth by any Greek state. The events of this contest, which fixed the attention of all Greece, have been described by Thucydides, and form the most interesting portion (lib. vi. and vii.) of his history. It is sufficient here to state, that the failure of the expedition was as complete as the hopes of success had been sanguine. Alcibiades, who had assisted in planning the expedition, and whose genius might have conducted it to a successful issue, having been unwisely removed from the command, was succeeded by Nicias, an able general, but one who had been hostile, from the outset, to the project, and who, though brave and experienced, wanted the ability and decision required for the conduct of such an enterprise. After various vicissitudes, the besiegers and besieged changed places. The defeat of the Athenian fleet, which had been cooped up in the great harbour, in an attempt to force a passage through their enemies, may be said to have terminated the expedition, and with it the glory and empire of Athens. '*In hoc portu*,' says Cicero, speaking of the great harbour, '*Atheniensium nobilitatis, imperii, gloriae naufragium factum existimatur.*' (In Verrem, lib. v. cap. 37.)

A few years after the defeat of the Athenians, which occurred anno 413 B. C., the supreme direction of affairs at Syracuse was usurped by Dionysius the Elder, whose character presents a singular compound of greatness and meanness, generosity and cruelty. Dionysius the Younger, who succeeded his father, was finally expelled from Sicily by Timoleon, who having demolished the citadel constructed by the elder Dionysius, and his magnificent tomb, restored the Syracusans to their freedom, and, having vanquished their enemies, retired into private life. They did not, however, long preserve the liberty given them by Timoleon. In the course of a few years Agathocles attained to the supreme authority. After his death the city underwent various revolutions, being sometimes the ally of the Carthaginians and sometimes of the Romans. In the end it was subjugated, though not without a vigorous resistance, by the latter.

It withstood, for a lengthened period, all the efforts of the Roman general, who had to contend, not only against the natural strength and fortifications of the place, but also against the extraordinary talents and wonderful machines of Archimedes, the greatest geometer, and one of the greatest geniuses of antiquity. At length, however, the Romans gained possession of the city, anno 200 B.C., partly by stratagem, and partly by the treachery of one of the Syracusan leaders. Archimedes unfortunately lost his life in the confusion that followed the taking of the city. (Livius, lib. xxv. cap. 28-31.)

Under the Romans Syracuse continued to be a great and important city. It was taken by the Saracens in 878, and given up to military execution. But, notwithstanding this and many subsequent calamities, it continued to be of considerable importance till 1693, when it was laid in ruins, and most part of its ancient monuments destroyed by the dreadful earthquake of that year. In addition to Archimedes, Syracuse has to boast of having given birth to Theocritus, the first and greatest of pastoral poets, and to Moschus.

SYRIA and PALESTINE, or JUDEA, two of the most celebrated regions of the E. hemisphere: the former includes the ancient Phœnicia, and the latter is sometimes called the Holy Land, from its being the theatre of most of the great events recorded in sacred history. These famous countries have, for many centuries, ceased to be independent, and have for a lengthened period formed a portion of Asiatic Turkey: they extend principally between the 31st and 37th degs. N. lat., and the 34th and 41st E. long., having N. the pachaics of Itehil and Marash, in Asia Minor; NE. and E. the Euphrates; SE. and S. the Arabian Desert; and W. the Mediterranean. Previously to the subjugation of the country by Mehemet Ali, it was divided into the four pachaics of Aleppo, Tripoli, Acre, and Damascus. Palestine, or the Holy Land, comprised in the two latter pachaics, forms the S. portion of the region, being about 200 m. in length by 80 m. in its extreme breadth. The entire length of Syria and Palestine may be about 450 m. N. and S., its breadth varying from 100 to 280 m. Its area has been estimated at 48,000 sq. m.; and its pop. at from $1\frac{1}{4}$ to 2, and even 3 millions; but probably 1,500,000 may not be far from the mark. Colonel Campbell, a few years since, estimated it at 1,864,000, of whom 997,000 were supposed to be Mussulmans (Turks, Arabs, &c.), 22,000 Ansarians, or Bedouins, 17,000 Metualis and Yezidis, 48,000 Druses, 260,000 Maronites and Christians of the Romish church, 345,000 Christians of the Greek church, and 175,000 Jews. The practice of polygamy among several of these tribes, aided by the extensive conscriptions of Mehemet Ali, is said to have produced a great excess of females over males.

The W. or coast portion of Syria is mountainous, while the more inland portion, or that to the E. of the Orontes and Damascus, is mostly flat. The mountains run mostly N. and S., parallel to the Mediterranean. The principal chain, in different parts of its course, is termed Alma-Dagh, (an. *Mons Amanus*), Jeb-el-Anzeyry, and Lebanon: it runs at an average distance of about 24 m. from the sea, from the range of Taurus, in Asia Minor, as far S. as the vicinity of Tyre, where it terminates. The chain of *Anti-Libanus* detaches itself from the foregoing in about lat. 34°, and running S. parallel to, and at no great distance from the latter, encloses the famous valley anciently called *Cœle-Syria*. About where Libanus terminates, Anti-Libanus divides into two chains, enclosing the valley of the Jordan, the

Dead Sea, &c., continuing subsequently to bound the valley of *El Ghor* to the head of the Gulf of Akaba. Both Libanus and Anti-Libanus give out numerous lateral spurs, some of the former extending so as to project, like Mount Carmel, in bold headlands on the coast. These subordinate ranges, with the W. declivity of Libanus, and the E. declivity of Anti-Libanus, are by far the most fertile portions of the mountain system. *Cœle-Syria*, though fertile itself, is enclosed between precipitous and barren heights. The mountains which surround the Dead Sea, and those to the W. of the Jordan, are arid, stony, and full of precipices and caverns, and have a melancholy, desolate appearance, harmonising well with that of the desert by which they are bounded on the E. For further details respecting the mountain region of Syria, see *LEBANON*. Palestine consists principally of rugged hills and narrow valleys. It has, however, some fertile plains of considerable size W. of the mountains, as that of Esdraelon (an. *Megiddo*), 80 m. in length by 18 in breadth; that of Sharon, famous in antiquity for its roses (supposed to be the flower of a species of *cistus*, with which it is covered); but by far the most extensive and valuable plain is that of Haouran, E. of the Jordan and of Mount Gilead, and trenching on the 'Desert.' 'By the great Syrian desert, however, we are not,' says Mr. Addison (*Damascus and Palmyra*, ii. 216, 217), 'to understand a bare wide waste of sand, like the great African desert. The term must be considered to mean destitute of settled inhabitants, towns, villages, and houses, and peopled only by roving pastoral tribes. Instead of sand, the uninhabited district beyond Damascus consists of a fine black soil, covered with long, burnt-up, rank grass and herbs, and inhabited by antelopes, wild asses, and wild boars, which search out the thinly scattered spots where water is to be found. The same description of country, we are told, continues the whole way to Palmyra. In summer the soil is parched and cracked into innumerable fissures by the burning rays of the sun, and the herbage and vegetation are all killed; but having previously come to maturity, and scattered their seed upon the ground, no sooner do the winter rains commence than the dry grass is beaten down and rotted, and the seeds, moistened by the abundant rains, sprout up with astonishing luxuriance. In summer the Bedouins are obliged to congregate in the vicinity of pools and wells; but in winter they spread themselves over the wide surface of the desert, and make long journeys with their flocks and herds.'

The principal rivers of Syria are the Euphrates, Jordan, and Orontes, severally noticed in this work. The coast line is watered by numerous small streams falling into the Mediterranean, which contribute greatly to fertilise the land, but of these none are navigable. The largest and most remarkable lake is that of Asphaltites, or Dead Sea. The next in size is that of Tiberias, or Gennesareth, the theatre of some most remarkable miracles. (Luke and Matt. viii.; Matt. xiv. 25.) It is about 16 m. in length, from 5 to 6 m. in breadth, and is traversed throughout its centre by the Jordan, of which, in fact, it may be regarded as an expansion. On its E. side it is confined by bold, barren, and precipitous mountains, but elsewhere its shores are generally level. According to Dr. Clarke (*Travels*, iv. 216), 'it is longer and finer than any of our Cumberland or Westmoreland lakes, though it be perhaps inferior to Lake Lomond, in Scotland. It does not possess the vastness of the Lake of Geneva, although it much resembles it in certain points of view. In picturesque beauty it comes nearest

to the Lake of Locarno in Italy, although it be destitute of any thing similar to the islands by which that majestic piece of water is adorned. It is inferior in magnitude, and perhaps in the height of its surrounding mountains, to the lake Asphaltites, but its broad and extended surface, added to the impression under which every Christian pilgrim approaches it, gives to it a character of unparalleled dignity. Its unbroken margin, and the total absence of wood on its shores, without a boat or vessel to be seen throughout its whole extent, give it a melancholy, monotonous appearance.

Several combats took place on this lake between the Jews and Romans, and its banks were formerly the seat of several flourishing cities. Of these, however, Tabaria, the miserable representative of the ancient *Tiberias*, is almost the only existing relic. The Lake of Gennesareth, like all other inland seas, is subject to squalls and sudden gusts of wind, that render its navigation rather dangerous. The *Bahr-el-Murji*, near Damascus, and the lakes of Horus and of *Agi Dengis*, near Antioch, are the only others worth notice. The coast of Syria and Palestine presents a nearly straight line, extending through six degrees of lat., being but little indented by arms or inlets of the sea, the principal being the bays of Scanderoon and Antioch; and though it was in antiquity the seat of a great maritime people, it has very few good harbours: the best are those of Scanderoon and Acre. The former, however, is inconveniently placed, quite at the N. extremity of the country, and is besides very unhealthy. The harbours of Tyre, Sidon, &c., so famous in antiquity, are now, for the most part, filled with sand, or otherwise choked up.

Geology and Minerals.—Of these we have no authentic information. The prevalent rock is limestone, abounding in fossil remains, and hollowed into numerous caverns. The higher parts of the Libanus ranges seem, however, to consist of greywacke, slate, and other transition rocks, and the rocky mountains skirting the Dead Sea, of granite, gneiss, and dolomite. Antioch is situated in a great tertiary basin, everywhere broken, however, by serpentine and diallage rocks. The whole of the Haouran is covered with a species of blue stone, very hard yet porous, and of which all the mill-stones of Syria are made. Volcanic matters cover a considerable extent of country, and the traces of extinct volcanoes are met with in many places. There are occasional indications of coal; but, except building stone, salt, with which a great part of the soil is highly impregnated, and asphaltum, from the vicinity of the Dead Sea, are almost the only mineral products of much value.

Climate.—Owing to the great differences of elevation and exposure, the greatest dissimilarity prevails with respect to temperature. On the whole, however, the country may be said to have two climates: one very hot, which is that of the coast and the interior plains, such as those of Balbec, Antioch, Tripoli, Acre, Gaza, and Haouran; and the other, or that of the mountains, at least at a certain height, temperate, and similar to that of France. In most parts, the occurrence of the rainy seasons, as well as the quantity of rain which falls, are very variable. The winter in the plains is so moderate, that the orange, date, banana, and other delicate trees, flourish in the open air, and it appears equally extraordinary and picturesque to the European at Tripoli to behold under his windows, in the month of January, orange-trees loaded with flowers and fruit, while the lofty summits of Lebanon are seen covered with ice and snow. But in the more

northerly parts of the country, and to the E. of the mountains, the winter is more rigorous, without the summers being less hot. This is occasioned by the E. plains being high above the level of the sea, exposed to the parching blasts of the E. and NE. winds, and screened by the mountains from the humid winds from the W. and SW. that sweep over the Mediterranean. At Aleppo winter commences about the middle of December, and usually lasts for six weeks or two months. The frosts, however, are seldom of any considerable intensity; snow rarely lies above a day; narcissi are in flower during the whole of this season, and hyacinths and violets make their appearance before it is over. Spring commences in February, and is extremely pleasant, having no defect but its short duration. Early in May corn is nearly ripe; and by the end of that month the heats commence, and the country begins to assume a parched and barren aspect. From this period to the middle or end of September no rain ever falls; and the inhabs. sleep exposed on their terraces, without danger from damps or other noxious influences. At Aleppo an interval of between 20 and 30 days usually occurs between the first and second rains, during which period the weather is serene and extremely delightful; and if the rains have been at all heavy, though but of a few hours' duration, the country assumes a new face. After the second autumnal rains the weather becomes variable, and winter approaches by degrees. The vernal are heavier than the autumnal rains, and, like the latter, are often accompanied with thunder. The trees frequently retain their leaves till the beginning of December. The heats of summer are usually tempered by westerly breezes; but when during this season the *samiel* occurs, that is, when the winds blow from the Arabian and Persian deserts, or from the E. inclining to the S., the heat becomes suffocating and excessive, and the inhabs. have no resource but to shut themselves closely up in their houses. Luckily, however, these winds are not of very frequent occurrence, and sometimes they do not occur once in a summer. Shocks of earthquakes are common; and, in 1822, Aleppo and several other towns were nearly destroyed by one of these visitations.

It is clear, therefore, as Volney has stated, that 'Syria unites a great variety of climates, and collects within a narrow compass pleasures and productions which Nature has elsewhere dispersed at great distances of time and place. With us, for instance, seasons are separated by months; there, we may say, they are only separated by hours. If in Saïde or Tripoli we are incommoded by the heats of July, in six hours we are in the neighbouring mountains, in the temperature of March; or, on the other hand, if chilled by the frosts of December, at Besharrai, a day's journey brings us back to the coast, amid the flowers of May. The Arabian poets have therefore said, that "the Sannin (Lebanon) bears winter upon his head, spring upon his shoulders, and autumn in his bosom, while summer lies sleeping at his feet." I have myself experienced the truth of this figurative observation, during the eight months I resided at the monastery of Mar-Hanna, seven leagues from Beyrout. At the end of February I left at Tripoli a variety of vegetables which were in perfection, and many flowers in full bloom. On my arrival at Antoura I found the plants only beginning to shoot, and at Mar-Hanna everything was covered with snow. It had not entirely left the Sannin till the end of April, and, already, in the valley it overlooks, roses had begun to bud. The early figs were past at Bey-

rou, where they were first gathered with us, and the silkworms were in cod before our mulberry-trees were half stripped. To this advantage, which perpetuates enjoyments by their succession, Syria adds another, that of multiplying them by the variety of her productions. Were nature assisted by art, those of the most distant countries might be produced within the space of twenty leagues. Even at present, despite the barbarism of a government inimical to all industry and improvement, we are astonished at the variety this province affords.'

It is true that Syria and Palestine are sometimes visited by the plague, but this is a consequence of sluttishness, and the want of proper care and precautions. Dysenteries and leprosies, are also frequent; but, on the whole, the country is highly salubrious, and has no peculiar disease, except the pimple or ulcer of Aleppo. (See ALEPPO.)

Products and Resources.—The beauty, fertility, and various products of Syria made her be regarded as one of the finest and most fruitful of countries; and her superiority in these respects has been extolled by the best modern travellers. It seems unnecessary, therefore, to dwell on what is so generally admitted. But the question as to the fertility of Palestine has given rise to some conflicting statements, and as the subject possesses peculiar interest, we shall notice it at some little length.

In the sacred writings, the fertility of the Holy Land is described in the most striking manner. Moses calls it a land that floweth with milk and honey; a land of brooks and waters, of fountains and depths, that spring out of the valleys and hills; a land of wheat and barley; of vines, figs, and pomegranates; of oil, olives, and honey; a land where there is no lack or scarcity of any thing; whose stones (or rocks) are iron; and out of whose mountains brass may be dug up. (Deuteronomy viii. 7. &c.)

It may, perhaps, be permitted to suppose, that as Moses wished to reconcile the Jews to the territory on which they were about to enter, and to extinguish any lurking desire on their part to return to the 'flesh pots' of Egypt, he would represent the 'promised' land under the most favourable colours. On the whole, however, it would seem, despite the statements that have been made to the contrary, that his description is substantially correct. It is strikingly confirmed by Tacitus, who says, speaking of Palestine, '*Rari imbres, UBER SOLUM. Exuberant fruges, nostrum ad morem; præterque eas balsamum et palmae.*' (Hist. lib. v. cap. 6.) It is true that Strabo, in his 16th book, speaks in very contemptuous terms of the country round Jerusalem; but he was by no means so well acquainted as Tacitus, either with the history of the Jews or with Judea; and besides, even though the accuracy of his statement as to the country to which he has referred were admitted, that would not authorise any inference to be drawn unfavourable to the general fertility of Palestine. In antiquity Judea was very carefully cultivated; and notwithstanding the great density of its pop., it is said, when in the zenith of its prosperity under Solomon, to have exported considerable quantities of corn. (1 Kings v. 11.) The declivities of the hills were formed into terraces, of which the vestiges still remain (Maundrell, p. 66, ed. 1740), and were covered with plantations of figs, vines, and olives. It was, as Tacitus has stated, particularly celebrated for its palm-trees, which, in fact, were the emblem of the country; and the aromatic plants that grew

with the honey which they stored in the hollows of the rocks and trees. Indeed Maundrell, whose accuracy is unquestionable, states that he perceived in many such places 'a smell of honey and wax as strong as if one had been in an apiary.' (In *loc. cit.*) We cannot, however, form any fair estimate of the state of the country in antiquity from the condition in which we find it at the present time, seeing it has groaned for centuries under the yoke of barbarous tyrants, and been subjected to every species of tyranny and oppression. 'The Holy Land,' says Dr. Shaw, 'were it as well peopled and cultivated as in former times, would still be more fruitful than the very best part of the coast of Syria and Phœnicæ, for the soil is generally much richer, and, all things considered, yields a more preferable crop. Thus the cotton that is gathered in the plains of Ramah, Esdrælon, and Zabulon, is in greater esteem than what is cultivated near Sidon and Tripoli. Neither is it possible for pulse, wheat, or any sort of grain, to be more excellent than what is sold at Jerusalem. The barrenness, or scarcity rather, which some authors may either ignorantly or maliciously complain of, doth not proceed from the incapacity or natural unfruitfulness of the country, but from the want of inhabitants, and the great aversion there is to industry and labour in those few who possess it. There are, besides, such perpetual discords and depredations among the petty princes who share this fine country, that allowing it were better peopled, yet there would be small encouragement to sow, when it was uncertain who should gather in the harvest. Otherwise the land is a good land, and still capable of affording its neighbours the like supplies of corn and oil which it was known to have done in the time of Solomon.' (Travels, p. 336, 4to. ed.)

At a more recent period Dr. Clarke said of the Holy Land (Travels, iv. 428), 'The delightful plain of Zabulon appeared everywhere covered with spontaneous vegetation, flourishing in the wildest exuberance. The scenery is to the full as delightful as in the rich vales upon the S. of the Crimea: it reminded us of the finest parts of Kent and Surrey. The soil, although stony, is exceedingly rich. We found the valleys W. of Jerusalem covered with plentiful crops of tobacco, wheat, barley, Indian millet, melons, vines, pumpkins, and cucumbers.'

These statements are more than sufficient to attest the natural riches and fertility of this famous region. As an agricultural or corn growing country it is, indeed, far inferior to Egypt and many other states: but the variety of its surface and products, the salubrity of the climate, and the productiveness of its cultivated lands, would make it, were it possessed by an industrious, well-governed people, a most desirable country. Recently, however, the condition of Syria and Palestine has been changed materially for the worse. The destructive contests of which it has been the theatre, the consequent destruction of property, and the interruption of industry, have reduced Syria and Palestine to a state of depression to which they had never previously sunk. During the ascendancy of the Egyptians, Mehemet Ali attempted to introduce the same compulsory or forcing system into Syria and Palestine that he had introduced into Egypt. With this view the principal officers of the government and the army, and the more opulent inhabitants, were compelled to undertake the task of restoring ruined villages, and the culture of their lands. Government intended, by means of the increased cultivation of wheat and barley, to render Syria independent of

a surplus for exportation. In good harvests, indeed, Syria, particularly its S. part, previously produced sufficient corn for its own consumption; and had the measures undertaken by the Egyptian government been persevered in, there can be little doubt that there would have been a great increase of produce. But in 1837 the influence of the new system was paralysed by a drought; and the events that speedily followed overturned at once the power and the projects of the Egyptian government.

The landed property of Syria, as of the rest of the Turkish empire, is supposed to belong to the sultan, as the vicegerent of God and the Prophet; and the principle, that it did so, in fact, was acted upon, at the conquest of the country, by the Caliph Omar, in the 7th, and by the Turks under Selim I., in the 16th century. At present, however, this assumed property of the sultan is a mere legal fiction. Soon after Selim's conquest, the ruinous effects of the general confiscation became so apparent, that measures were taken for giving the occupiers a right of property in the land on paying a small quit-rent. Land may now be classed under three heads: that belonging to the sultan and government; *vacou* or entailed lands; and real property, belonging to the proprietors, and descending by inheritance. The lands and property belonging to the sultan and government are those escheating in different ways; such as lands abandoned in consequence of non-cultivation during three years, lands left by the extinction of families, and lands confiscated. Entailed property, called *vacou el haramain*, consists of that settled by private individuals for the maintenance of public caravanserais, fountains, and charitable institutions; and of that vested in the hands of the clergy for behoof of certain parties, and their heirs or nearest of kin. Some lands are settled on the eldest heir in perpetuity, and cannot be sold, though they may be exchanged. According to the rule of the Ottoman law, Franks and other foreigners cannot hold land in the Turkish dominions; but, in fact, they do hold it, by means of long leases or otherwise, which make it little less secure than freehold. In the succession to property, the sons inherit twice as much as the daughters.

In Lebanon, almost every male inhab. is a small proprietor; and in the neighbourhood of Beyrout there are a great number of landholders who, for the most part, cultivate the white mulberry tree. Large proprietors are few, except among the emirs of Mount Lebanon, some of whom have extensive estates, which they either cultivate on their own account, or let out to farming tenants.

The *miri*, or land-tax, is not assessed in Syria by any invariable rule, or according to any admeasurement of the land. A government is assessed in a certain amount, which is apportioned among the different villages according to their greater or less amount of pop., or more or less extent of land; and the peasants themselves apportion the payments each has to make. In the cultivation of all kinds of produce, except silk, the landed proprietor supplies the peasantry with seed, and a certain sum of money to buy oxen, cattle, and implements of husbandry; and receives 10, 15, or 20 per cent. of the produce, according as the ground is more or less taxed. The remainder is divided into two equal parts, one of which the proprietor takes, and the other is for the peasants. These last are obliged to repay the money advanced to them, but not the seed.

The old Roman plough, drawn by bullocks, is that almost universally employed. Wheat, barley,

principally in the plain of the Haouran, which has always been considered the granary of Syria. It is inhabited by Turks, Druses, and stationary Arabs, and is visited in spring and summer by several Bedouin tribes. Burckhardt computes the resident pop. at from 50,000 to 60,000. The fertility of the soil depends entirely upon the water with which it is supplied, and the harvest is, therefore, in proportion to the abundance of the winter rains, and the extent of artificial irrigation. Lands which cannot be irrigated usually lie fallow every other year, though a part is sometimes sown in spring with sesamum, cucumbers, melons, and pulse. Where an abundance of water may be obtained from neighbouring springs, the soil is sown with lentils, pease, and sesamum after the grain harvest. In middling years wheat is said to yield 25 times the seed; and the produce of barley is said sometimes to average 50, and even 80 times the seed: though these statements are usually much exaggerated, and but little to be depended on. The first harvest is that of horse-beans, at the end of April: vast tracts are sown with these to serve as food for cows, sheep, and camels. Next comes the barley, and, towards the end of May, the wheat harvest. The wealth of a cultivator is estimated by the number of *fedhans*, or yokes of oxen, he employs. The owner of two or three is estimated rich, and he will probably possess, besides, two camels, a mare or gelding, or a couple of asses, and forty or fifty sheep. Taxes are very heavy in the Haouran. There is, first, the *miri*, paid to the pacha, and which is levied on the *fedhans*, the amount depending on the sum at which the whole village is rated in the pacha's books, and which must be paid so long as the village is inhabited, be the number of *fedhans* employed few or many. Next is the obligation to supply the troops with provender; and the third and heaviest contribution paid by the villagers is the *khone*, or tribute (identical with the *black-mail* of the Scotch) claimed by the Bedouins, in return for their protection, or rather forbearance. Each village pays *khone* to the sheikh of a tribe, who is then bound to protect the inhabs., and pays a tribute of from 30 and 40 to 400 piastres to the pacha for this privilege. Lastly come the unlimited contributions exacted by the pachas. The receipt of the *miri* of the whole pachalic, which may amount to 250,000*l.*, is in the hands of Jew bankers, who not only get about 5 per cent., but contrive to extort something further on their own account. Families in the Haouran are constantly moving from one place to another. In the first year of their new settlement the sheikh acts with moderation towards them; but his exactions becoming insupportable, they migrate to some other place, where they have heard that their brethren are better treated: they soon find, however, that the same system prevails over the whole country. In addition to all those exactions, the crops in the Haouran are sometimes destroyed by mice, though not so often as in the neighbourhood of Hama and Hamah. But the worst enemies of the agriculturist are the clouds of locusts which sometimes devastate the country, devouring every 'green thing.' They are not, however, an unmitigated nuisance, having been used for food time immemorial, and are said to be both wholesome and palatable.

The most careful cultivation in Syria is exhibited on the slopes of Mount Lebanon and other inaccessible districts, where the inhab. enjoy a comparative exemption from the exactions of their Turkish masters. 'Stimulated by their sense of security' (says Volney, i. 300), 'they have, by dint of art and labour, compelled a rocky soil to become fertile. Sometimes, to profit by the water they

conduct it, by a thousand windings, along the declivities, or stop it by forming dams in the valleys; while, in other places, they prop up ground ready to crumble away by walls and terraces. Almost all these mountains, thus laboured, present the appearance of a flight of stairs, or an amphitheatre, each step of which is a row of vines or mulberry-trees. I have reckoned 120 of these gradations on the same declivity, from the bottom to the top of the mountain. So powerful is the influence of even the feeblest ray of liberty and security.'

The mulberry-tree flourishes on the coast and through the more fertile parts of the Lebanon range, and a little more attention to the culture of silk would render it in a few years the principal article of export. The mulberry plants are set in rows 6 or 8 ft. apart; they are cut off at a corresponding height, and suffered to retain only the fresh twigs. The arrangement generally made with the peasantry is to allow them one-fourth part of the silk for taking care of the worms, and reeling it off the cocoons. The landowner provides the leaves, which are gathered by the peasants. He also erects the sheds in which the cocoons are kept, which are simple reed enclosures, without any roof. The quantity of silk annually produced on Mount Lebanon is estimated at about 1,200 cantars, or 240,000 oke, fetching from 120 to 125 piastres the oke, of which about two-thirds are exported. About 400 cantars is considered an abundant crop in the Tripoli district. Aleppo receives about 250 cantars from Antioch, and other quarters. Its chief consumption there is in the manufacture of the cotton and silk goods used for upper garments by the wealthy inhabs.; but it is also sent into all parts of the Turkish empire, and quantities are sent to Genoa, France, and England. The average annual produce of cotton in the vicinity of Acre, Jaffa, Nablous, and other places in the S., is estimated at from 30,000 to 35,000 cantars, worth about 350,000*l*. In the N. the crops are exposed to great vicissitudes. The quality of the cotton is sometimes good, but more commonly inferior. The export is chiefly to Smyrna, and other parts of Turkey. Not more than from 1,000 to 2,000 cantars reach W. Europe, the quantity that comes to England being very trifling. The oil harvest is very precarious. From 8,000 to 10,000 cantars may be about the average consumption in Aleppo, half of which is produced in the neighbourhood. The average produce around Damascus is estimated at from 4,800 to 5,000 cantars. The oil has of late years been considerably improved, and its quantity augmented by the introduction of oil-presses from France. Wine might become an important article both of consumption and export; and at some of the convents of Lebanon (where the vine is suffered to trail on the ground) a very good wine, called *vino d'oro*, is met with. Madder and indigo grow wild; and the former, as well as the sugar-cane, has been partially cultivated. Ibrahim Pacha introduced the cochineal insect into Syria with every prospect of success; for the cactus, on which it feeds, grows there to an immense size, and forms, in fact, most of the hedges in the country. The dates of Syria are not equal in quality to those of Egypt or Nubia; but the date palm is so abundant that, as already stated, it was anciently the symbol of Judea; and it is probable that Phœnicia was so called from the abundance of this plant (*φοινίς*). Tobacco is grown in almost every part of Syria, its consumption being universal, both by males and females. The best is found in the districts of Aleppo, Latakia, Tripoli, and Mount Lebanon, large exports taking place from Latakia and Tri-

poli to Egypt and elsewhere. The total produce is estimated at 10,700 cantars a year. Scammony, the juice of a species of convolvulus, which grows in N. Syria, is a valuable article of export, and that from Aleppo is esteemed the best in the markets of Europe. But it is rarely obtained pure, the collectors first adulterating it with flour or starch, to give it colour and consistency, and with myrrh, to give it a bitter, aromatic taste. It is then sold to the Jew dealers, who further adulterate it in the same manner, mixing 4 or 5 rottoli of starch with 1 rottolo of scammony, in which state it is sent to England at a price of from 250 to 300 piastres per rottolo. From 1,200 to 1,500 loads of hemp are produced in the Damascus district; but it is not an article of export. From 200 to 250 cantars of bees' wax are annually collected in the Aleppo district, nearly half of which is sent to Europe.

The forests of N. Syria have lately supplied large quantities of timber, the arsenals and dock-yards of Egypt having been principally furnished from this source. From 70,000 to 80,000 trees, large and small, or about 14,000 tons of timber, principally pine, oak, and beech, are shipped annually for Alexandria.

The Holy Land in antiquity was eminently distinguished for its abundance of cattle, including sheep, goats, camels, and asses; and though much diminished in numbers, these animals still constitute a principal part of the wealth of the occupiers. No very large or formidable wild animals exist at present in Palestine; the fallow deer, gazelle, wild goat, jackal, fox, and porcupine are the principal. There are, however, numerous birds, including two species of vultures, great quantities of game, and wildfowl, and a great variety of reptiles is met with.

Conflicting statements have been put forth with respect to the actual condition of the peasantry. According to Mr. Consul Moore, 'the fellah, or peasant, in Syria, earns little more than a bare subsistence.' But Dr. Bowring, on the other hand (Report on Syria, 49-50), states that 'the condition of the labouring classes is, comparatively with that of those in England, easy and good. They feed on mutton at 3 piastres per oke, several times a week; bread daily; sometimes rice pillaus, and always bulgur pillaus (a preparation of wheat, husked and bruised, or half ground); their pillaus are made either with butter, olive or sesame oil; cheese, eggs, olives, various dried fruits, and an abundance of vegetables, beet roots, turnips, and radishes, preserved in brine or vinegar, and cucumbers and capsicums in vinegar, for winter use. Their clothing is not especially coarse; the fine climate permits them to wear light cotton and other similar apparel, and in the short winter they are generally well covered. Their lodging is good; generally each family has a separate house, or a set of rooms. Lodging generally in Syria is cheap, comparatively with most other countries. The Mussulmans have few holydays; the Christians have a great many, and their amusements are much of the same sort as the Mussulmans, if any thing, less sober; but, on the whole, none of the classes of the pop. can be taxed with habitual inebriety. But it is rare that any of the working classes can lay by sums adequate to enable them to pass the decline of life without labouring. In Syria a great portion of the labour is done by females: they are constantly seen carrying heavy burdens and fetching water; they bring home timber and brushwood from the forests, and assist much in the cultivation of the fields.' Field labour near Beyrout is paid at from 5 to 6½ piastres (1*s*. to 1*s*. 3*d*.); and artisans, as masons, carpenters,

&c., get 14 or 15 piastres (2s. 10d. to 3s. 10d.) a day. The yearly expenditure of one of the labouring classes may average from 12*l*. to 16*l*.

The fisheries are unimportant, except that of sponge; which is obtained along all the N. half of the coast; and, in a good season, about 3,500 oke are gathered, which are principally sent to Smyrna, Rhodes, and Marseilles.

Few of the *manufactures* for which Syria was anciently renowned, survive at present. In Damascus, there are about 4,000 looms for silk and cotton stuffs, each producing 4 or 5 pieces a week, worth from 80 to 95 piastres each. In Aleppo, nearly 6,000 looms of the same description were at work in 1829; but at present the number has diminished to 1,200, the consumption of rich stuffs having fallen off in favour of cotton goods, for which British twist is employed, and which occupy about 500 looms in that city. About 300 looms are also said to be occupied in the manufacture of gold and silver thread stuffs, and the total produce of the looms of Aleppo is estimated at 250,000*l*. sterling a year. In good oil years, from 7,000 to 8,000 cantars of soap are made in Aleppo; and perhaps 12,000 cantars at Damascus, Jerusalem, Nablous, and other parts of the country: it is not, however, exported to any great distance. Coarse woollens, glass, earthenware, and leather are among the other chief goods manufactured. Horus, Hamah, and Beyrout are the other principal manufacturing towns. The ancient art of dyeing in purple is lost at Tyre, and Damascus blades have no longer their former reputation. In Palestine, a considerable trade is carried on in the manufacture of crosses, beads, rosaries, and such like trumpery.

Commerce.—In remote antiquity, Sidon and Tyre were the principal emporiums of the world: they were succeeded by Damascus, Antioch, and Joppa; and in later times by Palmyra, whose grandeur was mainly owing to her situation on the great route of traffic between E. Asia and Europe and W. Asia. But for a lengthened period the commerce of Syria has been comparatively inconsiderable. The internal trade of the country is greatly impeded by the want of good roads, those that exist being mostly mere mule or camel tracks. But, notwithstanding, gum arabic, tragacanth, assafetida, opium are brought from the surrounding countries; galls and barilla from beyond the Euphrates; saffron from Persia and Natolia; hare, fox, and jackal skins; yellow berries and goats' hair from Asia Minor; and these, with cotton, goats' and sheeps' wool, silk, tobacco, and other kinds of raw produce, previously specified, form the principal exports. The imports consist chiefly of colonial produce and European manufactures: coffee (W. India), from France, Italy, and England; sugar, from France and Great Britain; pepper, spices, rice, dyeing drugs, copperas, cotton manufactures, cambrics, shirtings, nankeens, imitation shawls, and cotton twist, for the most part from England; iron, tin, sal-ammoniac, woollen cloths, from France and Belgium; silks from France, glass wares from Bohemia, by way of Trieste, are the most important. The caravans from Bagdad, Mosul, and Erzeroum, to Mecca, pass through Syria, bringing galls, indigo, Mocha coffee, buffalo-skins, tombaq, gum, Cashmere shawls, and a few Indian manufactures, in return for European manufactures and cochineal; and constant caravans travel between Aleppo and Aintab, bringing oil, grain, and leather for the use of the former, which is by far the most important depôt in the interior of Syria. The subjoined table shows the value of the imports of British and Irish produce and

manufactures into Syria and Palestine, in each of the years 1862 and 1863:—

| Imports from the United Kingdom | 1862 | 1863 |
|--|----------------|------------------|
| | £ | £ |
| Apparel and Haberdashery | 2,103 | 2,987 |
| Coals, Cinders, and Culm | 4,832 | 6,380 |
| Copper, Wrought and Unwrought | 18,964 | 47,574 |
| Cotton Yarn | 25,744 | 47,751 |
| Cottons, entered by the Yard | 495,147 | 857,120 |
| at Value | 2,065 | 1,847 |
| Earthenware and Porcelain | 921 | 4,011 |
| Hardwares and Cutlery, unenumerated | 1,801 | 4,937 |
| Iron, Wrought and Unwrought | 10,921 | 15,012 |
| Tin, Unwrought | 6,517 | 4,160 |
| Plates | 1,138 | 1,373 |
| Woollens, entered by the Yard (inc. those formerly entered by the Piece) | 5,865 | 7,100 |
| Woollens, entered at Value | 843 | 1,907 |
| All other Articles | 12,205 | 24,403 |
| Total | 588,556 | 1,026,562 |

The exports from Syria and Palestine to the United Kingdom were as follows in 1862 and 1863:—

| Exports to the United Kingdom | 1862 | 1863 |
|---|----------------|----------------|
| | £ | £ |
| Bones of Animals and Fish (except of Whalefins) | — | 2,639 |
| Corn: Wheat | 27,105 | 132 |
| Barley | 11,938 | 40,209 |
| Cotton, Raw | 15,956 | 12,156 |
| Galls | 14,674 | 23,436 |
| Gum, Tragacanth | 5,942 | 696 |
| Madder Root | 7,723 | 6,585 |
| Oil, Olive | — | — |
| Rags and other Materials for making Paper | 982 | 5,463 |
| Raisins | 7 | — |
| Scammony | 3,473 | 5,433 |
| Seeds, Barl | 23,211 | 16,934 |
| Millet | — | — |
| Silk, Raw | 1,569 | 608 |
| Tobacco, Unmanufactured | 2,643 | 2,242 |
| Wool, Sheep and Lambs' | 7,857 | 3,562 |
| All other Articles | 3,162 | 1,778 |
| Total | 126,242 | 121,873 |

Government.—The immediate influence of the conquest of Mehemet Ali was exhibited not only in the increase of commerce, but in a better system of police, and a better administration of justice, an increase in the value of land and labour, an increase of cultivation, and greater religious toleration. But the rayahs, and working classes generally, though better protected, were more burdened and impoverished. They were forced to labour for sums far below the ordinary rate of wages; their camels and cattle were continually seized for the service of the government, and their property and resources, of whatever kind, were subjected to fresh exactions. Nothing was done to improve the means of communication in Syria during the Egyptian ascendancy; few public works having been undertaken, except extensive barracks in the large towns. Neither did the government make public education so much an object of its care as in Egypt. The forced cultivation introduced by Ibrahim Pacha enriched only the government, not the subject. But the short period during which Syria was held by Mehemet Ali, and the uncertainty of his tenure, were sufficient to hinder him, however much disposed, from undertaking or effecting any considerable reforms on these points, though if we may judge from what

he has done in Egypt, his changes, had he been allowed to introduce them, would hardly have been improvements.

Under the Egyptians, Syria was divided into districts; those of Aleppo, Damascus, Jaffa, Tripoli, Saida (Sidon), and Adana. Every town had a *mutsellim*, or head police magistrate; and in all having a pop. of above 2,000 persons, *Sciordi* *divans*, or town councils, were established by Ibrahim Pasha. These bodies consisted of from a dozen to 20 of the chief inhabs., without distinction of religion, who acted as a civil and commercial court, the decisions of which were subject to appeal to the divans of Aleppo or Damascus, and finally to the supreme government at Cairo. These courts greatly circumscribed the duties of the *cadi* sent annually from Constantinople to make the judicial tour of Syria. Justice was remarkable for its promptitude and severity. Murder, burglary, highway robbery, and other capital crimes are, however, comparatively rare in Syria. Europeans are subject to the jurisdiction of their own consulates.

No law exists making provision for the poor, though there are many private Mussulman endowments; and the other religious sects mostly support and relieve their own sick and paupers. In every parish, or mosque district, there are Mohammedan primary schools; and Jewish, Christian, and other primary schools are established wherever those sects prevail. But the instruction in these is mostly limited to that derived from religious books; and there is no native school in Syria where a more advanced education is given than in reading and writing, with the exception of the Greek college at Beyrout, where geography is studied from books printed at the Protestant presses. The American missionaries have a superior college in that town, and various other schools in the country.

The inhabitants of Syria comprise a mixture of different races, consisting partly of the posterity of those who occupied the country when it was overrun by the Arabs, that is, of the Greeks of the lower empire; partly of the posterity of the Arab conquerors of the country; and partly Turks, or Ottomans. And these, again, have been intermixed with each other, with the Crusaders, who invaded and held a portion of the country for a considerable period, and with the wandering Bedouins and Kurds. But, how different soever their origin, these races have, in the course of time, become equally naturalised to the country. The inhabs. are generally of a middling stature; those belonging to the southern are more swarthy than those belonging to the northern plains; and these, again, than those belonging to the mountains. On Lebanon, indeed, and in the mountainous districts generally, the complexion does not differ materially from that of the inhabs. of the S. of France. Arabic is the general language of the country; and Volney affirms, in opposition to the statements of Niebuhr, that neither Syriac nor modern Greek is any where in common use.

But notwithstanding the family or national resemblance by which the Syrians are now distinguished, they are distributed into different classes or tribes, all differing from each other in more or fewer particulars. Of these tribes, one of the most famous is that of the Druses, occupying the S. parts of Lebanon and Anti-Lebanon, and parts of the Haouran. They are supposed to be of Arabic origin, and to be disciples of a Mohammedan heretic of the 10th century. Their religion, notwithstanding the late researches of Mr. Jowett, Mr. Robinson, and others, still continues involved in a good deal of mystery. According

to Volney, they appear to have a contempt for all that the Mohammedans hold most sacred; for, he says, they neither practise circumcision, nor prayer, nor fasting, nor observe festivals nor prohibitions; and that they drink wine, eat pork, and allow of marriage between brothers and sisters, though not between fathers and children. They have an emir of their own, and enjoy a rude independence, to which, no doubt, their 'openness, sincerity, and engaging manners' (Clarke, iv. 306) are mainly to be ascribed. They are divided into two great classes, the learned, or initiated (*akout*), and unlearned, uninitiated (*djahels*). The former, who enjoy various privileges, are distinguished by their white turbans. Robinson says that 'the uninitiated perform no religious rite whatever, unless when circumstances oblige them to assume the appearance of Mussulmen.' (ii. 11.) They are eminently tolerant; and live on good terms with both Christians and Mohammedans. Mr. Elliot is not very favourable to the Druses. 'Outwardly,' says he, 'they are moral in their deportment; but it is doubted whether similar decorum prevails behind the scenes. Though polygamy be permitted, yet few have more than one wife, who, however, may be divorced at pleasure. They are extremely hospitable; yet, where no breach of hospitality is involved, the rights of blood and friendship are unhesitatingly sacrificed to interest. They have little personal, but much public pride. The women are distinguished by an appendage as strange, unmeaning, and hideous, as female fancy ever devised. Other nations may laugh at the long trains of the ladies of England, the infantine shoes of China, or the monstrous nose-rings of India; but the *tantour* of Lebanon surpasses them all. It is a plated, silver, or gilt tube, resembling a straight horn, 18 inches long, and standing out like a unicorn's, at an angle of 45° from the centre of the forehead, or from one side of the head: it is fastened by means of a spring, balanced by 3 heavy tassels hanging down the back, and covered with a white transparent veil.' (Elliot's Trav. ii.)

The Maronites are a Christian sect, principally inhabiting the country about Lebanon, adjacent to the Druses. They originated in the 6th century, and profess themselves to be followers of the monk Maron, whence their name. They effected a union with the church of Rome, from which they had never differed very widely, about 1215. They are divided into the two classes of sheiks or chiefs, and common people, and have a spiritual head, with the title of Patriarch of Antioch. They are all husbandmen; property is sacred amongst them; and, on the whole, they bear a good character. Like the Druses, they have succeeded in maintaining their independence, paying merely a moderate tribute to the pachas. The Metualis, another tribe, are Syrian Mohammedans, of the Shiite, or Persian sect. The Ansarians, Yezidi, and Samaritans have complicated religious systems, partly Mohammedan and partly Pagan.

The ancient history of Palestine is familiar to every reader of the sacred writings. Under Solomon, it became a rich and powerful kingdom; and after undergoing various vicissitudes, it finally became tributary to the Romans. At the period of the advent of the Messiah, it was divided into 5 provs., Judea, Samaria, Galilee, Peræa, and Idumea. In more modern times the Holy Land became the seat of a violent struggle. A singular combination of credulity and superstition gave birth to the Crusades; and for some centuries the recovery of the Holy Land, and especially of the Holy Sepulchre, was sufficient to precipitate hun-

dreds upon hundreds of thousands of blood-thirsty fanatics upon the East. At length, after oceans of blood had been spent, the victories of Saladin put an end to this deplorable phrenzy. In 1516, the country was taken by the Turks.

Very recently, or in 1832, Ibrahim, son of Mehemet Ali, pacha of Egypt, undertook and speedily effected the conquest of Syria and Palestine. It is doubtful, as already seen, whether they would have gained anything by the change; but it would be very difficult, indeed, to show that they could have lost any thing. The great European powers, however, with the exception of France, determined not to permit Syria to be disunited from the Porte; and, in 1840, a British fleet, after a short but tremendous cannonade, took Acre, and Ibrahim was compelled to agree to evacuate the province. It does not, however, seem that the states by whom this revolution was effected took any step whatever to ensure the better go-

vernment of the country in future; to obviate any one of the grievances by which it has been oppressed, or to make any stipulation of any kind in favour of the inhabitants.

SZEGEDIN, a royal free town of Hungary, co. Csongrad, of which it is the cap., on the Theiss, where it is joined by the Maros, 60 m. WNW. Arad, and 100 m. SE. Pesth, on the railway from Pesth to Temesvar. Pop. 62,546 in 1862. Szege-din consists of the town-proper, tolerably well built, and chiefly inhabited by Germans; the fortress, the residence of a commandant and gar-rison, connected with the town by two bridges; the upper and lower suburb, and the corn market. It has a house of correction, a lyceum, gymnasium, Piarist college, and military school; and is the see of a Greek protopapas. Szege-din has a good deal of trade, chiefly in corn, soda, soap, and to-bacco, with several soap and other factories. It also supplies some of the best river craft in the kingdom.

T.

TABRIZ, or **TAURIS**, a city of Persia, prov.

Adzerbijan, of which it is the cap., in a large and fine plain, on a small river which falls into Lake Urumea, 320 m. WNW. Teheran, lat. $38^{\circ} 10'$ N., long. $46^{\circ} 37'$ E. Its pop. was estimated by Chardin at upwards of half a million; but it has declined so much in the interval, that it is now probably under 80,000; and it is said by Mr. Kinneir to be one of the most wretched cities he had seen in Persia. (Persian Empire, p. 151.) Being surrounded by a forest of orchards, it ap-pears, from the high ground above it, to be of immense extent; and a modern traveller considers the circuit of the gardens of Tabriz to measure not less than 30 m. (Rawlinson, in Geog. Journal, x. 2.) But the town itself, which is nearly in the centre of this area, is only about $3\frac{1}{2}$ m. in circuit; it is surrounded with a brick wall and towers, and is entered by seven gates. It has few public buildings of note: the principal is the citadel of Ali Shah, a part of which is now converted into an arsenal, where many European artisans are or have been employed. A considerable portion of the pop. live in the suburbs, which straggle over the area of the ancient city, and are built of its ruins. Tabriz is said by D'Anville to represent the ancient *Ganzaca*, where Cyrus deposited the treasures of Cræsus, and which was afterwards taken by Heraclius; and it has been also supposed to be identical with the *Tábris* of Ptolemy. But, according to other authorities, it was built under Haroun al Raschid, of whom it was certainly a favourite residence. Its trade, which was formerly extensive, has greatly declined. Few cities have suffered so much from the ravages of war and earthquakes. Its climate is praised by the natives for its salubrity; but the changes of temperature are extremely great and sudden, and in winter the cold is so intense, that many instances have occurred of individuals, accidentally excluded from the city by arriving after the gates were shut, being found frozen to death in the morning.

TADCASTER, a market town and par. of Eng-land, W. Riding, co. York, partly in the liberty of St. Peter of York, and partly in Barkstone-Ash wapent., on the Wharf, here crossed by a stone bridge; 10 m. WSW. York, and 185 m. N. London by Great Northern railway. Pop. of par.

It has chapels for Methodists and other dissenters. Jesus' hospital for four poor men, a free grammar school, founded in the time of Queen Elizabeth, and Sunday schools, for some of which spacious build-ings have been erected. There are no manufac-tures, but a good deal of retail trade. Markets on Thursdays. Fairs, last Wednesday in April, May, and Oct., for sheep and cattle.

TAGANROG, a fortified sea-port town of Rus-sia in Europe, on the N. shore of the NE. angle of the sea of Azoff, denominated the gulf of the Don, about 10 m. from the mouth of that river. Pop. 25,230 in 1858. The foundations of Taganrog were laid by Peter the Great in 1698, but it after-wards fell into the possession of the Turks; and it was not till the reign of Catharine II. that it became of any considerable importance. It has ten churches, of which three are built of stone, a gymnasium, and a poor's hospital. It was in-tended by its illustrious founder to replace Azoff, the ancient emporium of the Don, the port of which had become all but inaccessible; and its whole consequence is derived from this circum-stance, or from its being the entrepôt of the com-merce of the vast countries traversed by that great river. Of the exports, wheat is by far the most important. The imports consist principally of wine, oil, fruit, drysalteries, cotton and woollen goods, spices, dye stuffs, tobacco, sugar, and coffee. The largest portion by far of the trade is carried on with Constantinople, Smyrna, and other Turkish ports; but a good deal is also carried on with the Italian and other foreign ports, and there is an extensive coasting trade with Odessa and other Russian ports.

Seeing that Taganrog was built to obviate the difficulties that had to be encountered by vessels entering the Don, through the shallowness of the water, it might have been supposed that care would be taken to place it in a position in which it should be, as far as possible, free from this defect. This important consideration seems, however, to have been in a great measure overlooked. The gulf of the Don is seldom navigable by vessels drawing more than from 8 to 9 ft. water, and even these cannot approach within less than about 700 yards of the town. They are principally loaded by carts, drawn each by a single horse, the ex-

posed to make Kertsch, on the E. coast of the strait of Yenikali, a depôt for the produce of the sea of Azoff; and while the latter would be much easier of access to foreign ships, the coasters that at present bring down the products of the basin of the Don from Nakhitcheven and Rostoff to Taganrog, would be able to bring them direct to Kertsch, where they might be landed and shipped with much greater facility and less expense. With the exception of a few foreign houses, the merchants are mostly all either Greeks, or of Greek origin, and are not wealthy.

The emperor Alexander I., whose reign will always form a memorable and brilliant æra in the history of Russia, expired at Taganrog on the 19th of Nov. 1825.

TAGUS (Span. *Tago*, Portug. *Tejo*), the principal and most celebrated river of the Span. peninsula, through the centre of which it flows from E. to W., between the basins of the Ebro and Douro on the N., and the Guadiana on the S. It has its source in the Sierra Albarracin, on the borders of Aragon and New Castile, about lat. 40° 25' N., long. 1° 35' W., 80 m. W. Teruel, and only 90 m. from the Mediterranean. At first it runs NW., but after having been joined by the Molina, its course is generally W. by SW., through New Castile and Estremadura, in Spain; and in Portugal between Beira and Alemtejo, and through Estremadura to the Atlantic, which it enters after expanding into a wide estuary, about 7 m. below Lisbon. Its entire length may be estimated at nearly 600 m., about three-fourths of which are in Spain. Its principal tributaries are the Jarama, Alberche, Alagon, and Zezere from the N., and the Rio del Monte, Salor, Sora, &c., from the S. Aranjuez, Toledo, Talavera, Almaraz, Alcantara, Abrantes, Punheto, Santarem, and Lisbon are on its banks. At its entrance into Portugal the Tagus is 130 yards in width, and at Punheto upwards of 300 yards. Above Lisbon, it expands into a wide basin, from 2 m. to 7 m. across, but opposite that city its breadth contracts to less than 2 m. The Tagus has been celebrated, both in antiquity and in modern times, for its picturesque beauty: nothing, however, can be more incorrect than these poetical descriptions. It flows, in fact, for the most part, through an arid country, bare of wood, and uncultivated; its banks are generally steep, its current impetuous, and its waters turbulent and muddy. It was famous in antiquity for its golden sands: '*Tagus auriferis arenis celebratur.*' (Plin. Hist. Nat., lib. iv. cap. 22; see, also, Silius Italicus, lib. vii. v. 755; Ovidii Metamorph., lib. ii. v. 251.) At present, however, very few particles of gold are ever found in the sands of the river, and though they may have been more abundant in antiquity, the fair presumption seems to be, that it is indebted for its celebrity, in this respect, rather to the yellow colour of its sands than to its gold.

Hitherto the Tagus above Lisbon has not been of much commercial importance, though it is navigable as high as Abrantes. Attempts have, however, been made to render it navigable from Toledo, and even Aranjuez.

TAIN, a royal and parl. bor. of Scotland, co. Ross, on rising ground, near the S. shore of the Frith of Dornoch, and near the mouth of the river Tain, 24 m. NNE. Inverness, with which it is connected by railway. Pop. 1,779 in 1861. The town possesses a good academy (founded in 1809), which has attracted a number of families to the town for the education of their children; but it has little or no manufacture, and the sand-bars on the coast deprive it of any advantage it might have derived from its maritime situation. New county buildings were lately erected on the site of

the old prison, a new gaol having been built at the SW. angle of the town. It has a handsome par. church, a Free church, a grammar school, and 3 branch banks. It is associated with Cromarty, Dingwall, Dornoch, and Kirkwall in sending 1 mem. to the H. of C. Reg. elect. 109 in 1865. It is governed by a provost, 2 bailies, and 15 councillors. Corporation revenue, 1,246*l.* in 1863-64.

TALAVERA DE LA REYNA, a city of Spain, New Castile, prov. Toledo, on the Tagus, 42 m. W. by N. Toledo, and 65 m. SW. Madrid. Pop. 9,285 in 1861. The town stands on a large and fertile plain, and is divided into two parts by the river, which is here crossed by a stone bridge of 35 arches, and 530 yards in length. The town is very irregularly built, with low houses and narrow and ill-paved streets: it has 8 parish churches, 8 monasteries, and 5 nunneries. Talavera has an economical society, schools of Latin, philosophy, and theology, and had formerly some manufactures of silk, stuffs, and porcelain. Its markets are tolerably well supplied with provisions.

It is supposed to represent the *Talabrica* of the Romans; it was taken by the Moors in 714, and various Moorish remains are still to be seen in the city and its neighbourhood. After many vicissitudes it was destroyed by the Moors in 1109, but was speedily rebuilt. It afterwards became an apanage of the queens of Spain, whence its name. In modern times it has been rendered famous by the obstinate battle fought in its neighbourhood, on the 27th and 28th of July, 1809, between the British and Spanish forces under Sir Arthur Wellesley (Duke of Wellington), and the French, under Joseph Bonaparte, assisted by Marshals Jourdan and Victor. The French, who commenced the attack, were repulsed at all points. The slaughter was great, and nearly equal on both sides.

TAMBOFF, a central government of European Russia, principally between the 52nd and 55th degs. of N. lat., and the 40th and 48rd of E. long., having N. Vladimir and Nijni-Novgorod, E. Pensa and Saratov, S. Voronege, and W. chiefly the latter and Riazan. Its length N. to S. is about 350 m., breadth varying from 100 to 250 m. Area, 24,420 sq. m. Pop. 1,910,454 in 1858. Surface flat, except in a few parts, where it is slightly undulating. Principal rivers, the Tsna and Mocksha, tributaries of the Oka, flowing N.; and the Vorona, a tributary of the Don, flowing S. In the N. the soil is sandy and marshy; a large proportion of the country, principally the marshes, being covered with forests; in the E., or steppe, so called from its being bare of wood, the soil consists principally of a black mould, and is comparatively fertile. Corn is the principal product; but, according to the official accounts, the crops are extremely variable, and scarcities frequently occur. The peasantry are well treated, and in good circumstances. Hemp is extensively grown, the value of the quantity exported amounting to 1,000,000 roubles a year. The forests along the Mocksha supply a good deal of timber for ship and boat building; and the inhabs. are there principally woodcutters, carpenters, coopers, or pitch and tar makers. Cattle, principally brought from the steppes of the Don, the Wolga, and the Caucasus, are numerous, and are extensively fattened for the neighbouring governments, and for Moscow and Petersburg. The horses belonging to the gentry are good, and have been much improved by the stud kept by the Orloff family; but the horses of the peasantry are wretched. The manufacture of woollen cloth is carried on to a considerable extent. Peter the Great established an extensive cloth manufactory, for the service of

TAMBOFF, a town of Russia in Europe, cap. of the above gov., about the centre of which it is situated, on the Tsna; 385 m. SE. Moscow. Pop. 31,101 in 1858. The town, which is about 2 m. in length by 1 m. in breadth, was originally founded and fortified in 1636 as a defence against the incursions of the Nogai Tartars. The houses are principally of wood; but there are various stone churches, a large monastery, gymnasium, civil hospital, and a military orphan asylum. In the school of cadets at Tamboff, about 100 pupils, sons of nobles, are instructed in French, German, and military exercises; and the most intelligent are afterwards sent to the *corps de cadets* at Petersburg. A high school for young ladies was founded in 1834, and there are various other schools. Manufactures of woollen cloths, alum, and vitriol are established, and the town has active general trade.

TAME, a river of England. See **THAMES**.

TAMWORTH, a parl. and munic bor., market town, and par. of England, principally in the co. Stafford, but partly also in Warwickshire, being divided into two parts by the Tame, where it is joined by the Anker, 6½ m. SE. Lichfield, and 110 m. NW. London, by London and North Western railway. Pop. of munic. bor. 4,326, and of parl. bor. 10,192 in 1861. Area of parl. bor., which the Boundary Act made co-extensive with the par., 12,920 acres. The town is well built, and a handsome bridge is thrown across each of the rivers. The parish church, dedicated to St. Editha, is supposed to occupy the site of a very ancient nunnery.

It is a large, handsome edifice, with a fine tower, and a crypt under part of the church. Some portions are of decorated date, and some perpendicular, and both good; some of the windows have had very fine tracery. In the tower is a curious double staircase. Numerous monuments adorn the interior of this church. There are various dissenting chapels, a hospital for fourteen poor men and women, founded and endowed by Thomas Guy, the founder of the famous hospital in Southwark which bears his name; a grammar school, which received endowments both from Edward VI. and Elizabeth. More recently a free school has been established by the late Sir Robert Peel, to whom a statue has been erected in the market place. Boys from the grammar school are eligible to a scholarship in Catherine Hall, Cambridge, and a native of the town to a fellowship in St. John's College, Cambridge. On an artificial height, near the town, is Tamworth Castle, a seat of the Townshend family. This castle, though now much modernised, is of great antiquity, having, according to some authorities, been founded by Ethelfleda, daughter of Alfred. It was conferred, with the town of Tamworth, by William the Conqueror, on Robert de Marmion, lord of Fontenay in Normandy, the exploits of one of whose supposed descendants have been immortalised in the best of Scott's poems.

Tamworth, which is on the line of the Roman Watling Street, was a place of much consequence, and the favourite residence of the Mercian kings during the Heptarchy. It appears to have been a borough by prescription, but was re-incorporated by Elizabeth. The municipal borough, which is much less extensive than the parliamentary bor., is governed by four aldermen and twelve councillors; it has no commission of the peace, though quarter sessions for civil causes are held. The commissioners of inquiry into the munic. affairs of the different bors. speak highly of the past go-

that the power thus vested in the body has been in any respect abused. Neither does it appear that the corporation, either as regards the appointment of members to the body corporate, or the exercise of the elective franchise, have been subject to the operation of any undue local influence. The absence of all complaint leads to the conclusion that the objects of municipal government have been satisfactorily attained in this borough; that the governing body has been judiciously selected, justice well administered, and the revenues carefully applied to public purposes.'

Tamworth has sent two mems. to the H. of C. since the 5th of Elizabeth. Previously to the Reform Act, the right of voting was in the inhabitants paying scot and lot. Registered electors, 520 in 1865. The late Sir Robert Peel, bart., the most disinterested and tried patriotic minister that this country has had since the Revolution, and, also, one of the ablest, was long representative for Tamworth, and one of its greatest benefactors. His seat of Drayton Manor is about 1 m. S. of the town, and he is interred, along with his father and mother, in the church of the adjoining par. of Basset Drayton.

TANJORE, a distr. of Hindostan, presid. Madras, and one of the most valuable in British India, ranking in point of cultivation and productiveness next to Burdwan in Bengal. It lies principally between lat. 10° and 11° 30', and the 79th and 80th degs. of E. long., having N. the distr. of Trichinopoly, W. Madura, and the ocean on the S. and E. Area, 8,625 sq. m. Pop. estim. at 1,300,000. About half the prov. is a flat alluvial delta formed and completely irrigated by numerous branches of the Coleroon, which constitutes the N. boundary. This delta is justly considered the granary of the Madras territories; almost the whole of it is cultivated with rice, which is here produced in larger quantities and with more certainty than in any other distr. on the E. coast. The average gross produce in rice yearly is estimated at 58,046 *garec*. The rest of the dist. S. of the delta is on a considerably higher level; its surface is undulating, and it comprises many varieties of soil. Tanjore was formerly assessed under the ryotwar system, but this was afterwards abandoned for the village settlement, under which last both the revenue and cultivation have increased very considerably. The pop. is for the most part Hindoo, and chiefly agricultural; but there are some manufactures of cotton and silk stuffs, of copper utensils at Combocoonum, and Manargooda. These, however, have declined greatly of late years, owing to the importation of cheaper English goods, though some manufactured articles are still exported with the agricultural produce to Bengal, Achin, Tranquebar, and the adjacent districts. The imports are iron, saltpetre, dry grain, oil, glue, wax, and tamarinds, from Coimbatore, Salem, and Trichinopoly. The trade of Tanjore is very considerable.

Tanjore was never permanently conquered by the Mohammedans, and Hindoo institutions and edifices have been preserved in it in much purity and perfection. In almost every village there is a pagoda, with a lofty gateway of massive though not elegant architecture, in which sundry Brahmins are maintained; and on all the great roads leading to these places are choultries for the accommodation of pilgrims. The district has been noted for the prevalence of *suttees*. In antiquity it constituted the principality of Chola, whence the whole coast afterwards acquired the name of Coromandel. It was conquered by the Mahrattas in 1675; but

pagodas and a fifth part of its nett revenue annually.

✓ **TANJORE**, a large city of Hindostan, cap. of the above distr., in a plain S. of the Coleroon, and 170 m. SE. Madras. Lat. $10^{\circ} 45' N.$, long. $79^{\circ} 12' E.$ Its pop. is probably from 35,000 to 40,000. It is said to be nearly 6 m. in circ., and consists of two separate portions, both fortified; one comprising the palace and other public buildings; and the other a celebrated pagoda, perhaps the finest specimen in India of a pyramidal temple. Its grand tower is 199 ft. in height, and is remarkable for its simplicity. In a covered area in this temple is a bull carved in black granite, 16 ft. in length by $12\frac{1}{2}$ ft. in height, deemed one of the best works of Hindoo art. Close to the temple stands an English church. Tanjore is strongly fortified, and the city is more regularly built, and has a larger proportion of solid and ornamental edifices than any other native town S. of the Krishna. The British residency is outside the walls to the S. Tanjore was unsuccessfully besieged by the British in 1749, and the French in 1758; but was taken by the former in 1773.

TAORMINA (an. *Taurominium*, or *Tauromenium*), a town of Italy, island of Sicily, prov. Messina, cap. cant., on a high, craggy mountain, on the E. coast of the island, about half-way between Messina and Catania, being 30 m. SW. the former, and 31 m. NE. the latter. Pop. 2,978 in 1862. Travellers speak in the highest terms of the surrounding scenery. 'Were I,' says Swinburne, 'to name a place that possesses every grand and beauteous qualification for forming a picture—a place on which I should wish to employ the powers of a Salvator or a Poussin, Taormina should be the object of my choice. Every thing belonging to it is in a large, sublime style.' It is fortified by an irregular wall and lines, constructed by the Saracens, surmounted by an old Saracenic castle and more modern works; and above all, on the summit of a tabled cliff, is the inconsiderable town and military post of Mola. Though Taormina has an immoderate proportion of convents and large buildings, it is ill-built and dirty, and, notwithstanding its elevated situation, it is said to be but indifferently healthy. On a fountain, in the main street, part of the statue of a centaur, with the addition of a copper nimbus, is held to represent St. Pancras, a native of the town, and its protector.

Taormina has some splendid remains of antiquity. Its theatre, which is most probably of Greek origin, is the object of universal admiration. It is of very ample dimensions, being capable of accommodating no fewer than 40,000 spectators, and is wonderfully well preserved. It is principally excavated in the slope of the mountain, its seats being hewn out of the rock: the proscenium and parts connected with the stage are built of brick, and are nearly entire; the space allotted to the orchestra is also preserved, as well as the dressing-rooms of the actors. Its greatest breadth is about 360 ft.; its extreme length, 300 ft.; and it is so admirably contrived that, even now, the slightest noise, as the tearing of a piece of paper on the stage, is distinctly heard in the most distant part of the theatre. The seats command the most superb views of Mount Etna, Aci Reale, Catania, and, it is said, of the country even as far as Syracuse. 'The spot,' says Sir R. C. Hoare, 'seems to have been created for a public edifice: behind and before are steep precipices, which leave just room sufficient to place this most noble and magnificent structure. I visited it frequently, and never left it without regret.' In addition to the theatre, Taormina has an entire side of a

naumachia, upwards of 350 ft. in length, with the remains of the aqueduct and the reservoirs that supplied it with water; and in every direction round the town are sepulchres, cenotaphs, tessellated pavements, and remains of remarkable edifices, attesting its ancient wealth and magnificence. The Dominican convent has a large court, surrounded with columns of fine brown and white marble. The inhabs. have some trade in wines and hemp, the former being, it is said, of superior quality, though very inferior to what they must have been in antiquity, when they occupied a high place at the Roman banquets.

Taurominium is of uncertain origin: it was taken by Dionysius the Elder, in the 94th Olympiad, or about *anno* 403 B.C. A Roman colony was settled in it by Julius Cæsar. The ancient city was ruined by the Saracens in 968; since which it has never recovered any considerable portion of its ancient importance.

TARANTO (an. *Tarentum*), a famous city and sea-port of S. Italy, prov. Lecce, anciently one of the wealthiest and most celebrated cities of Magna Græcia, near the N. extremity of the Gulf of Taranto; 42 m. WSW. Brindisi, and 160 m. ESE. Naples, with both which towns it is connected by railway. Pop. 22,531 in 1862. The city stands on what was formerly an isthmus, but is now an island, separating the gulf, or outer sea, from an inner bay, called the Little Sea (*Mare Piccolo*), 15 or 16 m. in circ. At its N. extremity is the old channel, leading to the Mare Piccolo, crossed by a bridge about 160 yards in length, over which an aqueduct is brought, conveying water to the city from the mountains of Mutina, about 12 m. distant. The channel on the S. side of the town is artificial, having been originally opened by Ferdinand I., and deepened by Philip II.: it also is crossed by a bridge about 50 yards in length. In antiquity the citadel occupied the site of the modern city.

The harbour of Taranto is excellent, and might, with little difficulty, be made all but perfect. In antiquity the Mare Piccolo, or inner bay, was the principal rendezvous of the Tarentine ships, where they lay perfectly secure from hostile attacks, and as safe in other respects as if they had been in dock. The entrance to the inner bay is now, however, so choked up with rubbish, that it is accessible only to small boats; but it might be easily cleared out, and the basin rendered as useful as ever. Adjoining the town, the Mare Piccolo has from 4 to 6 fathoms water. The present, or outer, harbour is at once extensive and safe. There are 4 fathoms water close to the town; and the bay, which is capacious, is protected by the islands of St. Peter and St. Paul.

The ancient city extended along the shores both of the gulf and the Mare Piccolo, and the walls which ran from the one to the other formed the base of the triangular space which it covered. Of its magnificent buildings, which included a temple of Neptune, the guardian deity of the city, scarcely any vestiges exist, except the outlines of an amphitheatre, some substructions of apparently a Roman work, and an immense mass composed of fragments of pottery. 'The shape of the modern city,' says a traveller, 'has been, with some justice, assimilated to a ship, being wide in the centre, and tapering at each end. The principal street runs from one of its extremities to the other in a waving line; and narrow and tortuous communications lead to two other parallel streets; one of which extends along the waters of the outward gulf, but considerably above their level, and is defended from their fury by a parapet wall and projecting battery. Here the best houses are situated. The

Marina, on the contrary, which borders the inner bay, or Mare Piccolo, is scarcely raised above its surface; and nothing can present a stronger contrast than the crowded, filthy, but lively appearance of the last, opposed to the quiet, clean, but deserted aspect of the former. The Marina is inhabited entirely by fishermen and their families, who constitute more than half the pop. of the place. The cathedral, dedicated to San Cataldo, a native of Ireland, is richly adorned within, and has a silver statue of its patron saint, some ancient columns, and inlaid work in *pietre pure*. Taranto has a formidable looking castle commanding its harbour, numerous convents, a diocesan seminary, two hospitals, an orphan asylum, and manufactures of linen and cotton fabrics. The great articles of commerce are oil and shell-fish. The neighbourhood was anciently famous for the *murex* and *purpura*, but these have been superseded by muscles and oysters, which are reared in immense numbers in the Mare Piccolo.

Tarentum was either originally founded, or, as is most probable, occupied by a colony from Sparta, about anno 700 B.C. The colonists, influenced, no doubt, by the advantageous situation of their new country for a seat of commerce and commercial navigation, became in no very lengthened period distinguished for their proficiency in these departments of industry, and their city is admitted to have been the greatest emporium of S. Italy, or Magna Græcia. '*Tarentus Lacedæmoniorum opus, Calabriae quondam, et Apulie, totiusque Lucania caput, cum magnitudine et muris, portuque nobilis, tum mirabilis situ: quippe in ipsis Adriatici maris faucibus posita, in omnes terras, Istriam, Illyricum, Epirum, Achaïam, Africum, Siciliam vela dimittit.*' (Florus, lib. i. cap. 18.) Polybius also has ably stated the commercial advantages enjoyed by Tarentum. (Lib. x. Frag. 1.)

The history of this great city is very imperfectly known. Her government, like that of most other Greek states, was different at different periods, being sometimes administered by kings or tyrants, and sometimes by the people. She was distinguished not only by her wealth and commerce, but by the splendour of her public buildings and works of art. She also became a favourite seat of literature and science; and the followers of Pythagoras, though proscribed in other parts of Italy, found here a safe asylum. The famous philosopher Archytas, a disciple of Pythagoras, was repeatedly placed by the suffrages of his fellow-citizens at the head of the government; and showed, by his judicious conduct in civil affairs, and as leader of the armies of the republic, that he was no less eminent as an administrator and a general, than as a moralist, a mechanist, and a geometer. (Bruckeri, Hist. Philosoph., i. 1118; see, also, Horace's Ode to Archytas, lib. i. ode 28.)

The refinement produced by the accumulation of wealth and the culture of literature and the fine arts, has been supposed by most ancient writers, and by their copyists in modern times, to have had a most injurious influence over the martial virtues of the Tarentines, and to have occasioned an all but universal degeneracy and corruption of manners. There does not, however, appear to be any real ground for such imputations. When the progress of Rome towards universal domination brought her armies and fleets into the territories and seas adjoining Tarentum, the latter did not seek to purchase a treacherous truce, by submitting to the dictates of the Roman generals. On the contrary, she made every effort to maintain her independence; and as she knew that her own forces were inadequate for such a struggle, she wisely sought assistance from others; and it was at her

instigation that Pyrrhus invaded Italy. After the departure of Pyrrhus, Tarentum attached herself to the party of Hannibal; and it was not owing to any deficiency of bravery, but to treachery, that Fabius ultimately obtained possession of the city.

The conduct of the Romans on this was consistent with their behaviour on every similar occasion. The city was delivered up to military execution; and such of the inhab., amounting to about 30,000, as had escaped the massacre, were sold for slaves. (Livius, lib. xxvii. caps. 13-16; Plutarch's Life of Fabius.) Tarentum never fully recovered from this dreadful blow; though, notwithstanding the preference shown by the Romans for Brundisium, she had again become, in Strabo's time, a considerable city. A little to the N.E. of Tarentum, near the Galesus, were situated the fertile valley and ridge of Aulon, the beauties of which have been described in such glowing terms by Horace. (Lib. ii. od. 6.)

TARARE, a manufacturing town of the S. of France, dép. Rhone, cap. cant., in a narrow valley on the railway from Paris to Lyons, 20 m. NW. the latter. Pop. 14,569 in 1861. The town is the centre of a manufacture of plain and figured muslins, which, within a circle of from 10 to 20 leagues of mountainous country, employs wholly or in part at least 50,000 hands, about 20,000 being adult handloom weavers, from 15,000 to 16,000 women and children employed subsidiary to these, from 4,000 to 5,000 employed as agents or otherwise by the manufacturers; the rest, chiefly females, being occupied in embroidering or figuring the plain goods. Most of the weavers work at their own homes, and the manufacturers do not generally carry on business on a large scale, or employ many hands. A portion of the weavers in the country get from 75 cents. to 1½ fr. a day; those of the town from 2 fr. to 2 fr. 50 c. and sometimes 3 fr., according to their skill. The manufacturer furnishes only the reed and the upper mounting, all the rest being at the expense of the workmen. Those who are in the town weave all the year round, whereas those in the country do not weave for more than seven months a year, the remaining five months being occupied in agricultural employment.

TARASCON, a town of France, dép. Bouches-du-Rhone, cap. cant., on the Rhone, opposite Beaucaire, with which it communicates by a new suspension-bridge, 13 m. E. by S. Nismes, on the railway from Nismes to Avignon. Pop. 13,489 in 1861. The town is surrounded with walls flanked by towers, and is commanded by a castle on a rock overhanging the river, built in the 13th century, and formerly the residence of the counts of Provence. The streets are wide and regular, and one of the principal is lined with arcades. The par. church, a fine Gothic edifice of the 11th century, has a richly sculptured entrance, and a subterranean chapel, in which is a marble statue of St. Martha. Tarascon has a public library, a theatre, town-hall, court of justice, two hospitals, and barracks; and in the neighbourhood is a very extensive nursery called the *Pepinière de Tonnelle*. It has, also, manufactures of silk and woollen stuffs, some trade in boat-building, and in wine, brandy, and oil.

TARBES (an. *Bigorra*, post. *Tarvia*), a town of France, dép. Hautes Pyrenees, of which it is the cap., in a fine plain, on the Adour, here crossed by a stone bridge of 6 arches, 24 m. E. by S. Pau, with which it is connected by railway. Pop. 14,768 in 1861. Tarbes is one of the best built and cleanest towns in the S. of France. Its houses, constructed chiefly of marble, stone, or brick, and

roofed with slate, have usually gardens attached, of considerable size. A wide main street, containing numerous inns and cafés, runs through the centre of the town, which is also divided into three nearly equal portions, by two large open spaces; one, the *Place de Maubourguet*, being planted with trees, and forming a favourite promenade. The streets crossing the main thoroughfare are almost equally wide and regular, and nearly all lead into suburbs, of which there are 5, surrounding the town on every side. Every quarter of Tarbes is well supplied with water from the river. There are few public edifices worth notice. The chief is the prefecture, formerly the bishop's palace, a building of different dates, but with an imposing general effect. The cathedral is on the site, and, it is said, consists of a portion of the ancient fortress of *Bigorra*; it is internally adorned with some columns of Italian breccia. The old castle of the counts of Tarbes now serves for the prison. The college and theatre are handsome. Tarbes is a bishop's see, the seat of tribunals of primary jurisdiction and commerce, and a forest board, and has schools of design and architecture, a royal dépôt d'étalons, and some manufactures, principally of copper, iron, and other metals. It is the great commercial entrepôt for the country immediately N. of the Pyrenees, and has a large market, once a fortnight, frequented by individuals from a distance of 20 leagues round.

TARN, a dép. of France, reg. S., formerly inc. in Languedoc; principally between lat. $43^{\circ} 30'$ and $44^{\circ} 10'$ and long. $1^{\circ} 30'$ and 3° E., having, N. and NE. Aveyron; SE. and S. Hérault and Aude; SW. Haute-Garonne; and NW. Tarn-et-Garonne. Area, 578,977 hectares. Pop. 353,633 in 1861. This dép. is inclosed by mountain-ranges on the NE. and S.; it slopes to the W., in which direction its rivers, the chief of which are the Tarn, Agout, and Viour, have their courses. The Tarn rises in Mount Lozère, and flows in a general SW. direction, through the déps. Lozère, Aveyron, and Tarn, to about 15 m. from Toulouse, where it turns NW., and ultimately falls into the Garonne, 22 m. above Agen. Its principal affluents are the Aveyron, on the right or N. side, and the Agout on the left. Florac, Milhau, Alby, Montauban, and Moissac are on its banks. It is navigable for about 90 m. from its embouchure. The arable lands in this dép. are estimated to comprise 326,410 hectares: meadows, 41,848 do.; vineyards, 31,243 do.; woods, 80,291 do.; and heaths and wastes, 61,439 do. With the exception of the mountain tracts, the soil, speaking generally, is extremely good, and the valleys are not inferior in fertility to any in France. Agriculture, however, is in a very backward state, and the rotation of crops can hardly be said to be introduced. But the supply of corn, notwithstanding, exceeds what is required for home consumption. It produces from 400,000 to 450,000 hectolitres of wine, of which that of Gaillac, partly red and partly white, is the best. It is improved by a sea voyage: the white wines have similar qualities. Before the introduction of indigo into commerce, a good deal of woad was raised in the dép., and it is still cultivated round Alby. Cattle, of a good breed, are rather numerous, and the produce of wool is estimated at 150,000 kilogr. a year. There are mines of iron, copper, coal, and marble. Near Alby is a very extensive work for the conversion of iron into steel. The manufacture of cotton and woollen fabrics and yarn, of which Castres is the centre, employs about 15,000 hands. Silk furniture stuffs are made at Lavaur. Morocco leather, paper, cords,

glass, copper wares, and files, in various parts. Tarn is divided into 4 arronds.: chief towns, Alby, the cap., Gaillac, Castres, and Lavaur. This dép. is one of the chief seats of Protestantism in France, and was a principal scene of the crusades against the Albigenses.

TARN-ET-GARONNE, a dép. of France, reg. S., in about lat. 44° , and principally between the 1st and 2nd degrees of E. long.; having N. the dép. of Lot, E. Aveyron, SE. and S. Tarn and Haute-Garonne, and W. Gers and Lot-et-Garonne. Area, 372,016 hectares. Pop. 232,551 in 1861. Surface generally undulating; in the S. and E. there are, however, some hill ranges of considerable height, the sources of a number of small streams. Principal rivers, Garonne, Tarn, and Aveyron, all flowing through the S. half of the dép. The arable lands are estimated to comprise 229,224 hectares; the meadows, 17,346 do.; vineyards, 36,703 do., and woods, 45,387 do. A greater proportion of wheat is raised in this than in any other of the S. déps. of France. Rye, maize, and oats are also grown, and the total produce of grain considerably exceeds the home demand. The produce of wine amounts to about 450 hectol. a year, of which about 250,000 are exported, and converted into eau de vie. The finest are the red wines of the arrond. of Castel-Sarrazin, the best of which have a fine colour, but the greater portion are inferior. Prunes, flax, hemp, and oil-seeds are among the other principal articles of culture. Irrigation is not well understood, and the produce of hay is small. Live stock are, in consequence, less numerous than in the adjacent déps.; the quality of the wool is inferior. Hogs and poultry are extensively fattened, the former for export to Spain. The want of capital is a formidable obstacle to the progress of manufacturing industry. Some coarse woollen stuffs, with stockings and other fabrics of silk, are made at Montauban; serges, linen cloths, and woollen yarn in the arrond. of Castel-Sarrazin, and there are some considerable tanneries, paper and flour mills. Tarn-et-Garonne was made a dép. by Napoleon, on account of the importance of its capital, Montauban. It is divided into 3 arronds.

TARRAGONA (an. *Tarraco*), a city and seaport of Spain, in Catalonia, cap. prov. of its own name, at the mouth of the Francolí, in the Mediterranean, 45 m. WSW. Barcelona, on the railway from Barcelona to Valencia. Pop. 18,028 in 1857. This once famous city is now contracted to a space which covers only a small portion of its ancient limits, and is ill built and dirty. A large and broad street, with some handsome edifices, has, however, been laid out within the present century. Its fortifications consist, besides the town walls, of two castles, and several batteries to protect the harbour, but the height on which the city stands is commanded by Mount Olivo. The river Francolí, adjacent to the city, is crossed by a narrow bridge of six arches, and the town is entered by six gates. Near Tarragona is the building called the tomb of the Scipios, in which the father and uncle of S. Africanus, who were killed in battle with the Carthaginians, are said, though on no good authority, to have been buried. It is about 19 ft. sq. and 28 ft. in height, resembling the tomb of Theron at Girgenti. In the front, facing the sea, are statues of two warriors in a mourning posture, roughly cut out of the stones of the sepulchre, and much worn by the sea air. The inscription is so much defaced that it can hardly be deciphered. The cathedral of Tarragona is worth a visit, particularly the court and cloisters, which are surrounded with numerous pillars.

The archbishopric is one of the most ancient in Spain, having existed in the 7th century. It has several convents, a hospital, a seminary, academies of design and naval architecture, other superior schools, and a theatre. Tarragona is the chief exporting port of Catalonia. Its exports consist of nuts, almonds, wines, and brandy. The nuts sent to the English market are known by the name of Barcelona nuts; but they are neither grown near, nor exported from, Barcelona. They are grown more in the interior of the prov., and are all exported from, Tarragona. The average export of nuts to England is from 25,000 to 30,000 bags (4 to a ton) a year. The export of almonds is about 12,000 bags. From 5,000 to 5,500 pipes of wine are exported from Tarragona to Rio Janeiro, Guernsey, and Jersey, and about 400 pipes of brandy are exported chiefly for Cette and Cadiz, from which places it finds its way into the wine butts of Bordeaux and Xeres. Cork-wood and cork-bark are also exported from Tarragona.

Pliny says that Tarraco was founded by the Scipios, who planted a colony in it (lib. iii. cap. 3); but most probably it had been founded previously, and was only increased by the Scipios. It was the seat of a principal tribunal, and was, in fact, not merely the capital of *Hispania Citerior*, or *Tarracensis*, but of Spain, under the Romans. Augustus resided in it for a short period, and Hadrian enlarged its port and erected a mole. It was taken by the Goths in 467, and by the Moors in 714, from whom it was retaken by Alfonso of Aragon in 1220. It was several times the place of meeting of the states of Catalonia. In 1705 it was captured by the English, who at first intended to retain it as a military post, but afterwards abandoned it for Gibraltar. In 1811 it was taken and sacked by the French under Suchet. Orosius, the historian, is said to have been a native of Tarraco, though the fact has been disputed.

TARSUS, a celebrated city of antiquity, and still a town of some importance, in Asia Minor, pachalic of Itehil, cap. sanjak, on the Cydnus, about 12 m. from the Mediterranean, and 82 m. WNW. Scanderoon; lat. $36^{\circ} 46' 30''$ N., long. $34^{\circ} 46' 45''$ E. Its permanent pop. is estimated at about 7,000; but during winter a great many Turkish, Greek, and Armenian families flock into the town. The modern town does not cover one-fourth part of the area occupied by the city under the Romans, and few vestiges remain of its former magnificence. The remains of a theatre, and of a spacious circular building, an ancient gateway, and beyond the walls a singular and solid structure, 120 paces in length by about 60 in breadth, are among the principal. Some traces are perceptible of the more ancient walls, but those now inclosing the town are not supposed by Kinneir to be of an earlier date than the time of Haroun al Raschid, in the eighth or ninth century; and the castle is said to have been built by Bajazet. The houses seldom exceed one story in height; they are terrace-roofed, and the greater part are constructed with hewn stone, furnished by the more ancient edifices. There are two public baths, a number of mosques, several caravanserais, a small church, &c. The plain around Tarsus is very fertile, and cultivated by Greeks, chiefly for corn and cotton, which last is a principal article of export, the others being wool, beeswax, gall nuts, copper, goats' hair and skins, ox and buffalo hides, and hair sacks. The river Cydnus is now navigable only by very small boats, and the greatest part of the produce exported is shipped at Mersia, a port on the coast about four hours' journey W. at

year round. The value of the imports and exports amounts to about 100,000*l.* a year each.

Nothing is known of the origin of Tarsus; but it is abundantly certain that it was very ancient, and that it had either been originally founded by Greeks, or had subsequently received a Grecian colony. It was the metropolis of Cilicia, and was captured by both Cyrus and Alexander. It continued to flourish under the successors of the latter, and under the Romans. Strabo says it was very populous and powerful; and he farther adds, that its schools of philosophy, literature, and science were superior even to those of Athens and Alexandria (lib. xiv.); and though this is obviously an extravagant eulogy, there can be no question that it was a most distinguished seat of learning. St. Paul, the apostle of the Gentiles, was a native of Tarsus, where he was born in the second year of the Christian era, and where he acquired a competent knowledge of Greek literature before he went to study the law of Moses at Jerusalem. To ingratiate themselves with Julius Cæsar, the inhabitants changed the name of the city to Juliolopolis; and it is plain, from the statement of St. Paul (Acts xxiii. 28), that some of them, if not all, ranked as Roman citizens. Tarsus produced several other distinguished individuals; among whom may be specified Antipater, the stoic, and Athenodorus, the philosopher, and friend of Augustus.

TARTARY, TAHTARY, or TURKESTAN, a very extensive region of Central Asia, partly comprised in the Chinese empire, and partly distributed among the states of BOKHARA, BUDUKSHAN, KHIVA, KOKAN, and the KIRGHIS STEPPE.

TASMANIA. See VAN-DIEMEN'S LAND.

TATTA, a town of NW. Hindostan, and one of the principal in Sinde, near the Indus, about 180 m. above its mouth, and 55 m. SW. Hyderabad; lat. $24^{\circ} 44'$ N., long. $68^{\circ} 17'$ E. Pop. estimated at 15,000. Tatta is an open town, built on rising ground in a low valley. The houses are formed of wood and wickerwork, plastered over with earth; they are lofty, with flat roofs, but very confined, and resemble square towers. Some of the better sort have a base of brickwork, but stone has been used only in the foundations of one or two mosques. A spacious brick mosque, built by Shah Jehan, still remains, but it is crumbling to decay; and there is little else in modern Tatta to remind one of its former greatness. Its commercial prosperity passed away with the empire of Delhi. Of the weavers of *loongees* (silk and cotton fabrics), for which it was once so famous, 125 families only remain; and there are not forty merchants in the city. The country in its vicinity lies neglected, and but a small portion of it is brought under tillage.

Tatta has been supposed to represent the *Pat-tala* of the ancients, and with some reason, since at this point the Indus, as stated by Arrian (lib. vi.), divides itself into two branches; but no conclusive evidence has been elicited on this point.

TAVISTOCK, a parl. bor., market town, and par. of England, co. Devon, hund. Tavistock, on the Tavy, 13 m. N. Plymouth, and 240 m. WSW. by Great Western railway. Pop. of bor. 8,857 in 1861. The town is on the NW. bank of the river, here crossed by three bridges, and from which the ground rises, by a steep acclivity on both sides, to the height of several hundred feet. A very contracted valley from the N. is also occupied by houses closely packed together. The parts of the town built on higher ground to the N., or overlooking the more expanded valley to the W., are of more modern date. The streets, in many parts,

sant. Tavistock appears to have owed its origin to an abbey of Black friars, founded here by an earl of Devon, in 961. At the dissolution of the monasteries, this abbey, along with the lordship of the town, was given by the king to John lord Russell, the ancestor of the present duke of Bedford. Some remains of the monastic edifice still exist: the former refectory is now used as an assembly room, and near one of the bridges is a large handsome arched and pinnaced gateway, apparently of the time of Henry VI. The principal remains of Tavistock Abbey are in the perpendicular style. The par. church has four aisles, a chancel, a tower at the W. end, and in its interior are several good monuments. The living, a vicarage, worth 298*l.* a year, is in the gift of the duke of Bedford. There are meeting houses for Wesleyans, Independents, Unitarians, and Friends, a large and convenient workhouse, a national school, chiefly supported by the duke of Bedford, some small educational endowments, almshouses, and other public charities. Tavistock was one of the four stannary towns in the co., and is governed by a portreeve, chosen yearly at the lord's court, who is also the returning officer of the bor. It has sent two members to the H. of C. since the 28rd of Edward I.; the right of voting, down to the Reform Act, having been in freeholders of inheritance in possession inhabiting within the borough. Reg. electors, 428 in 1865. The pop. is chiefly agricultural, though some serges and coarse linens are made, and mining and the working of iron occupy a few hands. Markets on Fridays. Fairs: Jan. 17, May 6, Sept. 9, Oct. 10, and Dec. 11, for cattle.

Sir Francis Drake, the famous navigator and naval commander, belonged to the immediate vicinity of Tavistock, where he was born, in or near 1545.

TAUNTON, a parl. bor. and market town of England, co. Somerset, W. division, hund. Taunton Dean, on the Tone, 87 m. SW. Bristol, and 168 m. WSW. London by Great Western railway. Pop. of parl. bor. 14,667 in 1861. Area of parl. bor. about 1,450 acres. Taunton is one of the principal towns in the co.; the main streets are spacious, well paved, and lighted with gas. They run mostly from E. to W. and from N. to S., the town being about 1 m. in length, and nearly as much in width. The houses are generally good, and have frequently extensive outlets and gardens; the appearance of the town indicates a prosperous, respectable community. There are, however, several lanes and courts (popularly called *colleges*) branching from the main street, which were formerly filled with inhabs. but little above the condition of paupers, who had been drawn into these close and unwholesome recesses to be within the limits of the bor., and to exercise the franchise extended to every inhabitant house-keeper. The most striking public edifice is St. Mary Magdalen's church, in an open space in the heart of the town. It is 98 ft. in length by 86 ft. in greatest breadth. Its nave is divided into five aisles by four rows of clustered columns, supporting bluntly-pointed arches; and at its W. extremity is an elegant quadrilateral tower, with a pinnacle at either corner, their entire height being 150 ft. The church is richly decorated both without and within, and has numerous monuments and a fine organ. Much of its decoration is said to be due to Henry VII., in return for the strenuous support of the Lancastrian cause by Taunton; but the tower and other parts of the edifice seem to have been erected somewhere about the end of the fourteenth century. St. James's, the old conventual church of Taunton Priory, is a plain but strong

and well-furnished building. There are several other churches, and chapels for Independents, Wesleyans, Baptists, Unitarians, Friends, and Roman Catholics. There is also a Franciscan convent, occupying what was originally intended for a general hospital. At the W. end of the town is the castle, built in the time of Henry I., on the site of another fortress, built, about 700, by Ina, king of the West Saxons. This edifice comprises the hall, in which assizes for the co. are held in Lent, general quarter sessions at Michaelmas, and a court of requests weekly. The market house is a large brick edifice, comprising the corn market, town hall, and assembly-rooms, and beside it is a handsome building in the Ionic order, the lower part of which is a fish and poultry market, and the upper a library and reading-room. The Taunton and Somerset Institution, established in 1823, has a spacious reading and news room, and a valuable, though not extensive, library. There is a neat theatre in the town. The numerous charities of Taunton include the grammar school, founded in 1522, and having a small endowment; a school for eighty boys and fifty girls, supported by voluntary contribution; several almshouses; the Taunton and Somerset hospital, with accommodation for twenty-six patients; an eye infirmary, and a lying-in charity.

Taunton was one of the first towns in England in which the woollen manufacture was established; but the woollen trade of the town has greatly declined, and the industry of the inhabs. is now chiefly exercised in manufactures of silk stuffs, as crapes, sarsenets, and of lace. The town derived considerable advantage from the construction of the Taunton and Bridgewater canal, by which a good deal of Welch coal is brought to it in return for the agricultural produce of the vicinity. Taunton was formerly a municipal borough, but in consequence of neglect in filling up the vacancies in the corp., it lost its charter in 1792. It is a parl. bor. by prescription, and appears to have sent 2 mems. to the H. of C. as early as the 28rd Edward I. Previously to the Reform Act, which confirmed its privilege of sending 2 mems., the right of voting was in potwallopers not receiving alms. Reg. electors, 817 in 1865. The returning officers are the bailiffs, chosen at an annual court-leet.

Taunton, though not alluded to in the 'Itinerary of Antoninus,' was, in all probability, known to the Romans, as a great number of imperial coins have been found in and near it. In the time of the Heptarchy it was a place of considerable note. In the civil war it sided with the Parliament, and in 1645 its castle sustained, with success, a long siege against the royal forces under Lord Goring.

TAURIDA, a government in the S. of European Russia, consisting partly of the peninsula of the Crimea, and partly of a tract on the mainland, lying between the Dniepr, the Black Sea, the Sea of Azoff, and the Berda. Area, 24,722 sq. m. Pop. 687,343 in 1858. The mainland part of the government, which, though the least interesting, is the most extensive, consists almost entirely of vast, and in many parts sterile, plains, denominated the Steppe of the Nogais, from the Tartar tribes, by which it is principally occupied. 'These,' says a traveller, 'are a very different people from the Tartars of the Crimea; they are distinguished by a more diminutive form, and by the dark copper colour of their complexion, which is sometimes almost black. They bear a remarkable resemblance to the Laplanders, although their dress and manner have a more savage character.' Above 17,000 Germans are colonised to the E. of the

river Molotchna. (For farther particulars see art. CRIMEA.)

TAY, a river of Scotland, being the largest of the Scotch, and, in respect of the quantity of water it conveys to the sea, it is the greatest of the British rivers. It rises in the high mountainous country a little to the N. of Loch Lomond, and, flowing NE. by Killin, expands into the beautiful long narrow lake called Loch Tay. Issuing thence, its course is N. and E. to Logierait, S. to Dunkeld, E. to Kinclaven, S., inclining a little to the W., to Perth; NE. to the point of Rhind; then north-easterly, past Dundee, till it falls into the sea between Tentsmoor Point and Buttonness. From Rhind Point to Dundee the channel of the river expands into an estuary called the Frith of Tay. From its source to Dunkeld the Tay flows with a rapid current, partly through a very wild, and partly through a highly picturesque, romantic country. Its subsequent course, as far as Perth, is through a comparatively fruitful country; and, from the latter to the sea, it flows through the richest and finest valley in Scotland.

From Buttonness to Dundee the river is navigable for ships of 500 tons' burden; and, at high water, vessels of above 100 tons' burden reach Perth, 20 m. above Dundee. Two lighthouses have been erected on Buttonness, to mark the entrance to the river. The bar at its mouth has $2\frac{1}{2}$ fathoms water over it. Dundee, the port of the Tay, has wet docks and a pier harbour: the latter dries at low ebb; but at high water springs it has a depth of 14 or 15 ft., and at neaps of 9 or 10 ft. Large ships anchor in the channel of the river. The mouth and channel of the Tay are a good deal encumbered with sand-banks; and its navigation is rather difficult, partly on that account, and partly from the strength of the tides.

Among the more remarkable of the tributaries of the Tay may be mentioned the Lyon, which joins it near Fortingal. The Tummel has its sources in the moor of Rannoch, and flowing through the loch of that name, is joined, near the pass of Killicrankie, by the Gary, from the confines of Loch Ericht. The united river falls into the Tay at Logierait. Near Kinclaven the Tay receives the united waters of the Airdle, the Isla, and other rivers flowing S. from the mountains on the confines of Aberdeenshire. At Rhind Point it receives its important tributary, the Earn, flowing E. from Loch Earn. The basin of the Tay comprises a space of about 2,400 sq. m.; and Mr. Smeaton ascertained that it carries to the sea more water than even the Thames. Its course from its source to Buttonness is estimated at about 110 m. It is the finest salmon river in Great Britain; its fisheries let for a large sum, the fish being mostly conveyed, packed in ice, to London.

TCHERNIGOFF, a government of European Russia, to the E. of the Dniepr, and between the government of Smolensk on the N. and that of Pultowa on the S. The estimates of the area differ very widely; perhaps it may be taken at about 19,000 sq. m. Pop. 1,471,866 in 1858. Surface flat; soil fertile; climate dry, healthy, and mild. Principal river Dniestr, which bounds it on the W., and Desna, by which it is intersected. All sorts of corn are raised, but principally rye, barley, and oats. Produce of the harvest estimated at about 4,000,000 chetwerts. Flax, hemp, tobacco, and hops are also cultivated. Oxen, of a very fine breed, are raised and fattened to a great size. Horses small, hardy, and active. There are some pretty extensive forests. Free cultivators are common in this and the other governments of Little Russia. Manufacturing industry, though still very backward, has made much progress

during the present century. Spirits largely consumed, and there are numerous distilleries. Commerce considerable: the exports consist principally of cattle, tallow, hides, spirits, honey and wax, potash and hempseed.

TEFLIS, or TIFLIS, a city of W. Asia, the cap. of Georgia, and of all the Caucasian and Trans-Caucasian provs. of Russia; on the Kur (an. *Cyrus*), 280 m. E. by N. Trebizond. Lat. $41^{\circ} 30' 30''$ N., long. $45^{\circ} 1' 30''$ E. Pop. about 30,000, most of whom are Armenians, with some Mussulman families. 'Teflis,' says a modern traveller, 'occupies the right bank of the Kur, in a contracted valley formed by irregular mountains, parallel with the stream on the side of the city, and hills coming down in a point quite to the water's edge on the other. A circular fort covers this point, and together with a small suburb is united to the city by a bridge of a single wooden arch, thrown over the river; while the ruined walls of an old citadel crown the top, and extend down the side of a part of the opposite mountain. The old and native part of the city is built upon the truly Oriental plan of irregular narrow lanes, and still more irregular and diminutive houses, thrown together in all the endless combinations of accident. Here and there European taste, aided by Russian power, has worked out a passable road for carriages, or built a decent house, overlooking and putting to shame all its mud-walled and dirty neighbours. A line of bazaars too, extending along the river, and branching out into several streets, together with much bustle and business, display some neatness and taste, and is connected with two or three tolerable caravanserais. Several old and substantial churches, displaying their belfries and cupolas in different parts, complete the prominent features of this part of the city.'

In the N. or Russian quarter, all the palaces, government offices, and private houses, lining broad streets and open squares, have a decidedly European aspect, and exhibit in their pillared fronts something of that taste for showy architecture which the edifices of their capital have taught the Russians to admire. Teflis has the appearance of an excessively busy and populous place. Its streets present not only a crowded, but, unlike many Oriental cities, a lively scene. Every person seems hurried by business. Nor is the variety of costumes, representing different nations and tongues, the least noticeable feature of the scene.'

The Armenian cathedral is a large and somewhat striking edifice; there are two mosques, and among the other places of worship is a German Protestant chapel. Teflis has many remarkable sulphureous hot springs, their temp. varying from 100° to 112° Fah.; and to these, it is supposed by some, the city owes its name. Over some of these the Russian government has erected the crown-baths, a plain edifice, but which, by being kept in good order, differs widely from all the other bath establishments in the city, and realises a handsome revenue. Teflis is very favourably situated for trade, and its commerce is pretty extensive, having greatly increased during the period of Russian occupation. Almost all the trade is, however, in the hands of Armenians; and a few years only half a dozen mercantile houses existed belonging to any other foreigners. In 1830, the Russians founded a school in Teflis, which has since been erected into a gymnasium; and there are some other schools. Georgia in general, and its capital in particular, has been long celebrated for the beauty of its women; and, according to the authority referred to above, 'this has not been overrated for we have never seen a

city so large a proportion of whose females were beautiful in form, features, or complexion, as Teflis.

Teflis does not boast a very high antiquity. It is said to have been built in 469, by Vachtang, the founder of a dynasty which ruled from the Euxine to the Caspian. It was taken by Jenghiz Khan; by the Turks in 1576; sacked by Aga Mehemet Khan in 1795; and fell to the Russians in 1801. It suffered greatly from the ravages of the cholera in 1830.

TEHERAN, or TEHRAUN, the modern cap. of Persia, prov. Irak-Ajemi, near the foot of Mount Elborz, which divides that prov. from Mazanderan, 211 m. N. Ispahan; lat. $35^{\circ} 40' N.$, long. $51^{\circ} 22' 50'' E.$ Pop. estimated at 70,000. It is about 5 m. in circuit, and is enclosed by a strong earthen wall flanked with numerous towers, surrounded by a glacis, outside which is a large dry ditch. The appearance of the city from a distance is picturesque; but it has few public edifices worth notice; and notwithstanding it has many good shops and bazaars, it is said by a recent traveller to have a 'mud-like' look within, its houses, like those of other Persian towns, being constructed of sun-dried bricks, while many of its streets are wretchedly paved. The *Ark*, or citadel, comprises, besides the royal residence and harem, quarters for the guards, the record chamber, treasury, hall for receiving ambassadors, and other public offices, 10 baths, two or three gardens, and reservoirs. The grand saloon in the palace is said to be very magnificent: the throne is a platform of pure white marble, raised a few steps from the ground, and carpeted with shawls and cloth of gold; and the whole interior of the apartment is profusely decorated with carving, gilding, arabesque painting, and looking-glass, the last material being interwoven with all the other ornaments, from the vaulted roof to the floor. The mosques, colleges, and caravanserais, though not very numerous, are in good repair.

Much less than a century ago, the present metropolis of Persia would hardly have been considered of sufficient importance for the cap. of a prov. It first became the metropolis towards the end of the last century, under Aga Mahomed Khan, who seems to have selected it for that dignity partly on account of its good position in a military point of view, and partly from its vicinity to the hereditary possessions of his family. Its greatest drawback is its unhealthiness from damp, which, with the excessive heats in summer, oblige the sovereign and his court to remove at that season, and encamp in pavilions and tents on the plains of Sultanea, or Oujan; at which period the resident pop. of Teheran is reduced to perhaps 10,000. The environs of Teheran are not unpleasant, the plain both to the E. and W. being covered with villages, and abounding in grain. To the N. of the town is a handsome palace, which its situation and the fine gardens that surround it make a delightful residence.

A short distance S. from Teheran are the ruins of the city of Rhé, generally supposed to be identical with the ancient *Rhages*, the capital of the Parthian kings, where Alexander halted for five days in his pursuit of Darius. The ruins cover a great extent of ground, having in their centre a modern village, with a noble mosque and mausoleum—an oasis in the midst of the surrounding desert. It should, however, be mentioned, that Major Rawlinson and others contend that the ruins now noticed are not those of Rhages, but of an Arabian city, called Rhei; and that the ruins of Rhages are to be found at Kalah-Erig, 30 m. E.

TEIGNMOUTH, a market town and sea-port of England, co. Devon, hund. Exminster, at the mouth of the Teign, in the English Channel, 12 m. S. Exeter, and 209 m. WSW. London by Great Western railway. Pop. 6,022 in 1861. The town is intersected by the Teign; the communication between its two divisions, each of which constitutes a parish, being kept up by a long wooden bridge across the river, having a drawbridge at either extremity for the accommodation of vessels. Area of both parishes, 1,280 acres. W. Teignmouth, or the portion on the W. side the river, is irregularly built and ill paved; but E. Teignmouth is beautifully situated, and having been of late much improved, is now one of the most favourite watering-places in the SW. part of England. The church of W. Teignmouth is a modern octangular structure, the living being a curacy worth 80*l.* a year, under the vicarage of Bishop's Teignton. In this part of the town there are Independent and Calvinist meeting-houses, a national school, a quay on the river, and a dock-yard, in which sloops of war and vessels of 200 tons' burden have been built. East Teignmouth church is mostly a modern edifice: the living, a perpetual curacy, worth 127*l.* a year, is in the gift of the vicar of Dawlish; and here, also, are a Baptist chapel, an endowed school for 18 poor children, some good inns, a theatre, reading-rooms, and other establishments usual in a watering-place. Teignmouth is governed by a portreeve, chosen annually at the court-leet of the lord of the manor. Many of its inhabs. are employed in the coast fishery, and others in the supply of goods to visitors: a good deal of the Haytor granite is also shipped from this port; but the bar at the mouth of the river renders the harbour accessible only to coasting vessels.

Teignmouth is of high antiquity, and is said to be the place at which the Danes first landed in 787. It gives the title of baron to the Shore family.

TÉLLICHERY, a town of British India, presid. Madras, and one of the principal sea-ports in the district of Malabar; on the W. coast of Hindostan, 42 m. NNW. Calicut; lat. $11^{\circ} 45' N.$, long. $75^{\circ} 33' E.$ Pop. estim. at 20,000. Tellicherry was the chief trading settlement of the British on the Malabar coast previously to 1800, when the E. I. Company's warehouses were transferred to Mahé, about 6 m. to the SE. The most wealthy natives, however, still reside at this town; which continues to be the mart for the best sandal wood from above the Ghauts, and cardamoms from Wynaad.

TEMESWAR, a royal, free, and fortified town of Hungary—beyond-the-Theiss, cap. co. of its own name, in a marshy plain, on the Alt Bega river; 72 m. NNE. Belgrade, on the railway from Pesth to Belgrade. Pop. 24,897 in 1857. The town has two handsome squares, and a number of very fine buildings. The county-hall, the palace of the bishop of Csanad, the residence of the commander, and the town-house, are all remarkable for their size and appearance. Temeswar was taken from the Turks in 1716 by Prince Eugene, who laid out and strongly fortified the modern town, which is now one of the principal fortresses of the Austrian monarchy. It has a Rom. Cath. and a Greek cathedral, a synagogue, seminary, Piarist gymnasium, arsenal, military school, some barracks, and various other military establishments, and is the seat of the principal civil establishments and authorities of the Banat. Good water is raised by machinery for the supply of the town. It has manufactures of silk and woollen stuffs, paper, &c.

articles and in the transit of agricultural produce. Its inhabs. are said to be generally opulent. Its commerce has been considerably facilitated by the excavation of the Bega canal, about 73 m. in length, which, passing by the town, unites it with the navigable portion of the Bega, and, consequently, with the Theiss and the Danube. This canal has also been advantageous from its assisting in drying the marshes by which the town is surrounded, though in summer it is still rather unhealthy.

Temeswar is supposed to represent the an. *Tibiscus*, to which Ovid was banished. It was taken by the Turks, under Solyman, in 1551, who held it till 1716.

TEMPE, a famous valley and defile in the NE. part of Thessaly, stretching from near Baba to the Gulf of Salonica, from 6 to 8 m. in length, between Olympus on the N. and Ossa on the S. It is traversed by the Selembria (an. *Peneus*), and is, in parts, so very narrow, that there is merely room for a military road alongside the river. In some respects the defile bears a striking resemblance to the pass of Killiecrankie in Scotland, but the scenery is incomparably more magnificent. The appearance of the chasm, and the traditions current in antiquity, leave little doubt that the rocks had been rent asunder by some tremendous convulsion of nature, which opened a passage for the waters that must previously have deluged the greater part of Thessaly. In some parts it is grand in the extreme. The precipices consist of naked perpendicular rocks, rising to a prodigious height; so that the spectator can scarce behold them from below without giddiness. Livy's description, therefore, in addition to its intrinsic grandeur, has all the majesty of truth: '*Rupes utrinque ita abscissæ sunt, ut despicere vix sine vertigine quidam simul oculorum animique possit. Terret et sonitus et altitudo per mediam vallem fluentis Penei amnis.*' (Lib. xlv. cap. 6; Clarke, vii. 870.)

The character of this gorge or defile is evidently that of wildness and savage grandeur, and does not, therefore, harmonise with the descriptions the poets have given of the *Zephyris agitata Tempe* (Hor. Od. iii. v. 24), and the *viridantia Tempe*. (Catullus, Carm. lxiii. v. 285.) No doubt, however, their descriptions apply not to the pass itself, but to a vale at the mouth of the pass next the sea, 'which, in situation, extent, and beauty, amply satisfies whatever the poets have said of Tempe.' (Cramer's Ancient Greece, i. 378.)

TEMPLEMORE, an inland town of Ireland, prov. Munster, co. Tipperary, about $1\frac{1}{2}$ m. W. from the Suir, and near the E. foot of the Devil's Bit Mountains, 74 m. SW. Dublin. Pop. 2,973 in 1861. Templemore is a neat town, in a comparatively rich and improved part of the country. It has a handsome par. church, a Rom. Cath. chapel, a Methodist meeting-house, a school on the foundation of Erasmus Smith, a fever hospital and dispensary, a market-house, a bridewell, and large infantry barracks. Petty sessions are held on Wednesdays: fairs on Jan. 30, March 30, May 17, June 28, July 30, September 3, October 21, and December 7.

TENASSERIM PROVINCES, the name given to a long and comparatively narrow slip of territory in India-beyond-the-Ganges, belonging to Great Britain, comprised within the Bengal presidency, with which, however, it has no natural connection. It consists principally of the provs. taken from the Birmanese in 1825-26, or of the W. or coast districts of Siam, comprising Martaban

lat., and about 98° and 99° E. long., having N. the independent Shan country, E. and S. Siam, and W. the Birmanese empire and the Indian Ocean. Area estimated at 32,500 sq. m., and pop. at 125,000. These provs. are shut off from Siam by one of the great mountain ranges, which, branching from the table-land of Yunnan, traverse the Ultra-Gangetic peninsula in a S. direction. The chain rises, in this part of its course, to the height sometimes of 5,000 feet, and is everywhere clothed with dense forests. Immediately along the coast the country is an alluvial flat covered with mangroves; and more inland, wherever it has been cleared, is found to be very fertile. It is extremely well watered; the great river, Than-lweng, or Thanlue, divides the prov. of Martaban from Birman, and there are a variety of minor rivers, some of which are navigable to a considerable distance.

In the N. provs. the year may be divided into the rainy and dry seasons, each of about six months' duration; but the latter resolves itself into the cold and hot seasons. These last are not very distinctly marked; but the coldest months are December and January, when the thermometer is sometimes, in the morning, down to 55°, but in the hottest part of the day ranges between 70° and 80°. The hot season immediately succeeds the cold, and continues until the rain begins to fall in April or May. The rains then commence, and continue until September or October; and although, during a part of this time, the sun be in its zenith, yet the almost incessant fall of rain renders this season the most refreshing part of the year. The annual fall of rain, during these six months, is about 200 inches. In the S., where both the climate and products in many respects differ, it rains at least every fortnight throughout the year. The Tenasserim provs. are, upon the whole, much more healthy than many parts of India. As in other tropical climates, the most frequent diseases, common to both natives and foreigners, are, dysentery, with intermittent, remittent, and bilious fevers. They seldom prove fatal to the natives, and usually do so to Europeans only when the constitution has been impaired from other causes. The staple product is rice, of which a dozen different varieties are cultivated. Upland rice is grown on the hill sides by the Karean tribes, and much rice by the Birmanese and other settlers. In the lowlands, in the beginning of April, the farmer weeds his ground, and about the first week in June, when the rains commence, he hires a drove of buffaloes, if he have none of his own, and drives them about in a compact body over the wet field until the whole soil has been sufficiently worked to receive the seed. The principal harvest is in December, when the grain is reaped by a sickle, somewhat like the English. The ears are trodden out by buffaloes, and the rice is husked and bruised by means of a wooden mortar, or by a handmill, formed of two grooved logs of wood, set upright and fitted into each other; a kind of machinery superior to that in use for the like purpose among other nations in a similar stage of civilisation. Indian corn is not much raised, but sweet potatoes, yams, beans, onions and cucumbers are common. Tobacco is cultivated all over Tenasserim, as every one smokes, 'from the child of three years of age to the decrepid grandsire; from the governor's wife to the rice beater.' (Low's Hist. of Tenass.) The sugar-cane is also general, though no marketable sugar be made. Cotton, hemp, indigo and pepper are only partially cultivated. Cardamoms, long

sapan, aloe, and many other valuable woods, with bamboos, rattans, and many balsamic and medicinal plants. Iron ore is found in Ye and Tavoy, tin is very abundant in the S. provs., but has not been seen in the N. Like gold, which is also widely diffused, it is obtained chiefly by washings. Trenches are dug, leading into the creeks, down which rapid streams run in the rainy season, and wash down the metallic particles. The workman goes into the water, with a wooden dish in the form of an inverted cone, and having filled it with sand and pebbles, whirls it round on the surface of the water, by which motion the lighter materials fly out, and leave the heavier down in the vortex of the inverted cone, consisting of a tea-spoonful, or upwards, of tin and sand. Without further cleaning it goes to the smelter, and produces from 50 to 75 per cent. of pure metal. Although all persons, Birmans or Kareans, are at liberty to procure the metal without any interference from government, yet few engage in the work, from which it may be reasonably inferred that the returns are not remarkably profitable. Coal has been discovered in Mergui. Salt is made in numerous parts along the coast, and large quantities of saltpetre have been obtained from the bats' dung, collected in immense limestone caves in different parts of the country. The number of elephants inhabiting these provs. is supposed to be proportionally greater than in any other part of India. The Birmese settlers hunt the elephants, and carve many kinds of articles from their ivory. Rhinoceros' horns are an article of trade, but the valuable skin of that animal is not met with in commerce, and, indeed, the trade in all kinds of hides, which might be made very profitable, has hitherto been wholly neglected. Wax, honey, tortoiseshell, and edible birds' nests are the principal commercial products derived from the animal kingdom. The insect races are in great variety, and constitute one of the greatest pests of the country.

The manufactures are few; those of cloth and silks are the principal, but they have been, in a great degree, superseded of late years by the cotton goods imported from England and Hindostan. The weavers are almost exclusively women, and there will hardly, perhaps, be found a house throughout the provs. which has not a loom. The inhabs. of Tenasserim and Mergui carry on a brisk petty trade with the ports between those towns and Rangoon. They also occasionally visit Pinang, the Nicobar Islands, Achin, Chittagong and Dacca, exchanging their own produce for betel nut, raw and wrought silks, white muslins, earthenware, woollens, petroleum, cutlery, Chinese umbrellas, a little opium and ambergris. The merchants of Tavoy are richer than those to the S.; their exports are of much the same kind; their imports are cotton, tobacco, petroleum, piece goods, cutlery, iron in bars, European and Bengal articles. But Martaban is the prov. best situated for commerce. Besides its trade seaward (see MAULMAIN), a great deal of internal petty traffic is carried on by boats of from three to thirty tons burden; and caravans arrive occasionally from the confines of China, bringing lac, drugs, swords, manufactured cottons and silks, raw silk, candied sugar, earth nuts, blank books, ivory, and horns; and taking back salt, spices, cotton, quicksilver, assafoetida, borax, chintzes, piece goods, broad cloth, and various European articles. The weights and measures, as well as the usages and habits of these provs., are mostly Birmese; the present inhabs. being of Birman extraction, though, according to tradition, the earliest inhabs. of the country were Siamese.

Maulmain is the cap. and residence of the governor and chief British authorities; subordinate officers are resident in Ye, Tavoy, and Mergui. Malcolm, the American missionary, has pointed out some of the advantages derived by these provs. from their connection with England. (South-Eastern Asia, 173-4.) 'English influence,' says he, 'in a variety of ways, has improved their condition. It has abolished the border wars, which kept the people and their neighbours continually wretched. Various other improvements are perceptible. Coin is getting introduced instead of masses of lead and silver; manufactures are improving; implements of better construction are used; justice is better administered; life is secure; property is sacred; religion is free; taxes, though heavy, are more equitably imposed; and courts of justice are pure generally. Formerly men were deterred from gathering round them comforts superior to their neighbours, or building better houses, for fear of exactions. Now, being secure in their earnings, the newly-built houses are much improved in size, materials, and workmanship. The presiding officer in each prov. sits as magistrate on certain days every week; and before him every citizen, male or female, without the intervention of lawyers, may plead his cause, and have immediate redress. Everywhere, in British Birmah, the people praise English justice.'

TENBY (Welsh, *Dynbych-y-Pysgod*), a parl. and mun. bor., market town, and sea-port of Wales, co. Pembroke, hund. Narberth, on the summit of a promontory on the W. side of Carmarthen Bay, 9 m. E. Pembroke, on the Great Western railway. Pop. of bor. 2,982 in 1861. The town consists principally of one long and broad street, lined with good houses, and pretty well paved. It is partly surrounded with walls, and is further defended by some batteries on the shore; its castle, supposed to have been built by the Flemings, by whom this part of the country was formerly occupied, is in a state of decay. The church of St. Mary is a spacious structure, 146 ft. in length and 83 in breadth, with an elegant spire 152 ft. in height, supposed to be the loftiest in Wales, and painted white to render it a conspicuous mark for seamen. The roof of the nave is supported by arcades, having fluted pillars, and the ceiling is formed of carved wood, ornamented with several figures and armorial bearings. In the interior are several monuments. An ancient edifice within a few feet of the W. entrance is now used as a school. A flight of steps on the outside leads to the apartment near which is a small arch in the style of Henry VII., and two others occur in an old wall opposite. These are supposed to have formed the principal entrances to St. Mary's College, once a convent of Carmelite friars, founded in 1399. The remains of St. John's chapel are situated in a marshy spot 200 or 300 yards from the town. Those of St. Julian's stand upon the pier, near its extremity. Opposite the town are some wild masses of rock, forming the islands of St. Catherine, and more distant are those of St. Margaret and Caldy. Eastward stretch the Norton sands bounded by grand and high cliffs. Round the S. and W. sides of the town are the white or whit-sands, presenting a romantic and agreeable walk, 2 m. in length, to Giltar. The town-hall, court house, new market and slaughter houses, public baths, assembly rooms, theatre, reading-rooms, and bowling green are the other most conspicuous objects at Tenby. The town was formerly a place of much commercial importance; and, after the settlement of the Flemings here, it exported considerable quantities of woollen cloths. At present its trade is inconsiderable.

Tenby is a creek of the port of Milford. Nine or ten vessels from Plymouth and Brixholme make it their station during the fishing season, and supply the Bristol market. Its oysters, which are of superior quality, are sent pickled to London, Liverpool, and other places. Tenby is now principally distinguished as a watering-place, for which it is singularly well adapted, by the great beauty of its situation, and the protection from rough weather which it receives from the contiguous head-lands. It has grown rapidly, especially in good houses; most of which have been built within the last 40 years. The public baths are both extensive and elegant; they comprise numerous bath and dressing rooms, warm and vapour baths, bed-rooms for invalids, a handsome promenade room, and are approached by an excellent carriage road. The water of their large reservoirs is changed every tide.

Tenby is governed by a mayor, three aldermen, and twelve councillors. Its earliest charters appear to have been granted about the time of Edward III., by the earls of Pembroke, but the earliest extant is of Richard III. Previously to the Municipal Reform Act there were nearly 400 burgesses in the corporation, but their functions were merely nominal; and the whole management of the bor. rested with the common council, which consisted of about 40 members. The town has only a few small endowments for charitable purposes. Courts of petty sessions weekly are held, but the only gaol consists of two large cells, formerly the old garrison dungeon. Prisoners are rarely confined here: when the term of imprisonment exceeds a month, they are sent to the gaol at Haverfordwest. The Reform Act did not alter the previous limits of the parl. bor., which now sends 1 mem. to the H. of C., in conjunction with Pembroke, Wiston, and Milford. It had previously sent one with Pembroke and Weston only, the right of voting having been in the burgesses, who, acting under the influence of the common council, returned the nominee of the patron of the borough. Registered electors, in the different bors., 1,510 in 1865. Markets, Wednesdays and Saturdays; fairs, May 4, Whit-Tuesday, July 31, Oct. 2, and Dec. 4.

TENEDOS, a small but celebrated island of Turkey in Asia, 15 m. SSW. from the mouth of the Dardanelles (an. *Hellespontus*), and about 5 m. W. from the shore of the Troad, which it still serves to point out; its highest summit, Mount St. Elias, being in lat. $39^{\circ} 50' 15''$ N., long. $26^{\circ} 3'$ E. Pop. estimated at 7,000. Though rugged, it is tolerably fertile, and well cultivated. The red muscadine wine of Tenedos is the best of the Levant. It begins to lose its colour when about 14 or 15 years of age, but retains its flavour and strength for a much longer period. The town, on the NE. side of the island, is defended by a small fort. On the N. the port is protected by a pier, and it has pretty good anchorage. In antiquity it was a sort of *dépôt* for the produce destined for Constantinople; and Justinian erected in it a large warehouse, the ruins of which are still extant, where vessels loaded with corn from Alexandria discharged their cargoes when they happened to be prevented, as was frequently the case, by contrary winds from making a passage through the Hellespont to the capital.

Tenedos, according to Strabo (lib. xiii.), had a temple dedicated to Apollo, but it is principally known from its having been mentioned in connection with Troy by Homer—

'Thou source of light! whom Tenedos adores;
Pope's *Iliad*, i. line 55.

and by Virgil. According to the latter, it was the

place to which the Grecian fleet made their feigned retreat before the sack of Troy:—

'Est in conspectu (Trojæ) Tenedos, notissima famâ
Insula, dives opum, Priami dum regna manebant.'
Æneid, ii. line 21.

TENERIFFE, or TEYDE (PEAK OF), a famous conical and volcanic mountain in the centre of the island of Teneriffe, of which its basis occupies the greater portion (see CANARY ISLANDS), rising to the height of 12,172 ft. above the level of the sea. The Peak consists of an enormous dome of trachyte, covered with layers of basalt. The summit of the cone (*El Piton*, the sugar loaf) is terminated by a crater surrounded by a circular wall, or parapet. Humboldt, who descended to the bottom of the crater, found the heat was perceptible only in a few crevices, which gave vent to aqueous vapours, with a peculiar buzzing noise. (Personal Narrative, i. 173.)

The ascent of the Peak is distinguished by a difference of vegetation somewhat similar to that which is observed on the ascent of Etna. Above the lower and more fertile tracts near the sea, where date trees, plantains, sugar-canes, Indian figs, vines, and olives flourish in profusion, rises what is called the region of laurels. These are fed by a vast number of springs, that rise up amid a turf covered with perpetual verdure. Extensive plantations of chestnuts occur in the lower part, above which rise four species of laurel, and an oak resembling that of Thibet. The underwood in the lower part consists of arborescent heath, and in the upper part of ferns. Above this commences a vast forest of fir and pine trees which characterise the colder regions of the earth. Succeeding to this is a vast plain, like a sea of sand, covered with the dust of pumice stone, which continually fills the air. It is embellished with tufts of the beautiful shrub called the *retama* (*Spartium nubigenum*, Aiton), growing to the height of nine feet, and loaded with odoriferous flowers, which are said to communicate a peculiar excellence to the flesh of the goats that feed upon them. At the entrance of this plain the rich verdure of the island terminates, as well as all appearance of habitation; and the traveller ascends afterwards through a complete solitude. Above this sandy plain are the *Malpays*, a name which the Spaniards apply to grounds destitute of vegetable mould, and covered with loose and broken fragments of lava. The ascent here is steep, and extremely fatiguing, as the blocks of lava roll from beneath the feet, and often leave deep hollows. At the extremity of the Malpays is a small plain called the *Ramblata*, from the centre of which the Piton, or conical summit, rises to the height of about 2,350 ft. Here are found those spiracles which are called by the natives the Nostrils of the Peak, consisting of crevices whence issue watery and hot vapours. The ascent of the Piton is steep, and rendered difficult by the loose ashes with which it is covered. At the top there is scarcely room to stand, and the crater, as already stated, is enclosed by a steep wall. The view from the top of the Peak, though characterised by peculiar beauty, falls far short of the magnificent prospect from the summit of Etna. The cultivated and wooded parts of the island are, however, seen in close proximity, and the steep and naked declivities of the upper parts of the mountain strikingly contrast with the smiling aspect of the country beneath. The transparent atmosphere enables the spectator to distinguish minute objects, such as houses, sails of vessels, and trunks of trees. Beyond the eye wanders on all sides over the vast expanse of the Atlantic, and commands the whole archipelago of

the Canaries. ■ has been alleged that the view extends as far as Cape Bojador, on the coast of Africa.

The summit of the Peak is a *solfatara*, or extinguished volcano, whence no eruption has taken place since its discovery by Europeans; but some eruptions have taken place from the sides of the mountain during the course of last century. In 1704, one occurred in the district of Guimar, which buried several valleys, and approached within a short distance of the port of Orotava. Two years after, in 1706, the lava, issuing forth in a different quarter, buried the town and port of Garachico, then the finest and most frequented in the island. Another eruption happened in June, 1798, not far from the summit of the Peak, but it was not productive of much damage.

Notwithstanding its proximity to the equator, and to the coast of Africa, the Piton, or cone, is covered with snow during several months of the winter, and snow is always found in the hollows not exposed to the sun's rays. A powerful heat is always felt on the ground at the summit of the cone, and Humboldt mentions that his hands and face, and those of his party, were frozen, while their boots were burnt by the heat of the soil on which they walked. (Humboldt's Personal Narrative, i. 147-194; Lyell's Geology, ii. 138.)

TENNESSEE, one of the U. States of N. America, in the basin of the Mississippi, between lat. 35° and $36^{\circ} 40'$ N., and long. 82° and 90° W., having N. Kentucky and Virginia, E.N. Carolina, S. Georgia, Alabama, and Mississippi, and W. the river Mississippi, which divides it from Arkansas and Missouri. Area, 45,600 sq. m. Pop. 1,109,801 in 1860. The E. part of this state is intersected by the Alleghany chain, which here sometimes rises to the height of 2,000 ft.; the middle part is hilly, while the W. portion is an extensive undulating plain. Principal rivers, after the Mississippi, the Tennessee and Cumberland, both tributaries of the Ohio. The Tennessee rises near Franklin in N. Carolina, and runs at first NW. to about 35 m. WSW. Knoxville; it then turns to the SW., and continues in that direction to near Decatur in Alabama. After a bend to the WNW. it again enters the state of Tennessee about long. 88° W., and its course thenceforwards is generally northward to its mouth in the Ohio, about 20 m. SW. Salem. At its outlet it is about 600 yards in width. It is navigable for steam vessels of large size for 250 m., and as much further for boats of 40 or 50 tons. It has several tributaries, some of which are navigable to a considerable distance. At present, no towns of consequence are situated on its banks. Tennessee is generally well watered, and, except in the mountainous parts, comprises a good deal of excellent land. Agriculture is the chief occupation of the inhabs.

The products are much the same as those of Kentucky, with the addition of cotton. Indian corn, wheat, and oats are the principal corn crops. Cotton is grown in most parts of the state. Tobacco is also cultivated to a considerable extent, its produce being estimated at about 36,500,000 lbs. In the E. grazing is a good deal attended to, and considerable numbers of cattle and sheep are reared for the markets of the eastern states. Coal, iron, salt, marble, and nitre are found; and some of these, with cotton, Indian corn, wheat, flour, tobacco, fruit, tar, turpentine, rosin, whiskey, live stock, salted meats, lard, coarse linen goods, and gunpowder, constitute the principal exports, being mostly sent down the Mississippi to New Orleans.

The legislature consists of a senate of 25 mems., and a house of representatives of 75 mems., who, with the governor, are elected for two years. The

judges of the supreme court are elected by ■ joint vote of both houses for twelve years, and those of the inferior courts, in the same manner, for twelve years. In the election for representatives, every free white male citizen has the right to vote in the co. of which he has been an inhabitant for six months previously. The pay of senators and representatives is four dollars a day. Murfreesborough was the former capital, but Nashville is now the seat of government.

The colonisation of Tennessee commenced about 1757, and the settlers entered warmly into the revolutionary war. The territory belonged to N. Carolina previously to 1790, when it was ceded to the United States; and on the 1st of June, 1796, it was received as a state into the Union. It sends ■ mems. to the House of Representatives.

TENTERDEN, ■ mun. bor., mar. town, and par. of England, co. Kent, lathe Scray, the mun. bor., comprising all the hund. of Tenterden, and the par. of same name, together with a part of the par. of Ebony; 43 m. SE. London. Area of par. 8,620 acres. Pop. of par. 3,656, and of bor. 3,762 in 1861. The town, which is finely situated on an eminence, environed by hop-grounds, is well built. It consists principally of a single street, continuous with which is the straggling village of Bird's Isle to the N., and a little to the E. is the hamlet of Lye Green. The par. church, a spacious structure, consists of a nave, N. aisle and chancel, with a well-built lofty tower at the one end, on which are sculptured the arms of the monastery of St. Augustine, to which foundation this church was appropriated in 1259. The living of Tenterden, a vicarage, worth 177l. a year, is in the gift of the dean and chapter of Canterbury. It has, also, chapels for Baptists, Wesleyans, and Unitarians, a free school founded in 1521, for six scholars, and which has been greatly enlarged by voluntary subscriptions, and several minor charities. Tenterden has no manufactures, and depends entirely on its retail trade with the rich agricultural country in which it is situated, and upon its proximity to Romney marshes; which has made it a place of residence for persons engaged in the grazing of sheep and cattle on the marsh.

In the reign of Henry VI., Tenterden was incorporated and annexed to the town and port of Rye; but the earliest existing charter is that of Elizabeth. It is governed, under the Mun. Reform Act, by a mayor, 3 aldermen, and 12 councillors, who hold petty sessions weekly, and a court of record every fortnight. Market day, Friday: fair, first Monday in May, for horses, cattle, and pedlery.

TEQUENDAMA (FALL OF), a celebrated cataract in the repub. of New Granada, Colombia, in the course of the Bogota river, a tributary of the Magdalena, a few miles W. from Bogota. A short distance above the fall the river is 140 ft. in breadth; but being forced into a narrow, though deep bed of only 40 ft. in width, it is precipitated at two bounds down a perpendicular rock, to the depth of 650 ft.; and, even in very dry seasons, Humboldt says the volume of water still presents a side view of 90 sq. metres. 'The cataract forms an assemblage of every thing that is sublimely picturesque in beautiful scenery. This fall is not, as has been commonly said, the loftiest in the world; but there scarcely exists a cataract which, from so lofty a height, precipitates so voluminous a mass of waters.' (Humboldt's Researches, i. 17.) The body of water, when it first parts from its bed, forms a broad arch of glassy appearance; a little lower down it assumes a fleecy form; and ultimately, in its progress downwards, it shoots forth into millions of small tubules.

chase each other like sky-rockets. The noise which attends the fall is quite astounding; and dense clouds of vapour are sent up, which rise to a considerable height, and mingle with the atmosphere, forming in their ascent the most beautiful rainbows. The comparative smallness of the stream which runs off from the foot of the fall, proves that a large proportion of the water is lost by evaporation. (Mod. Trav., xxvii. 330.) What gives the Fall of Tequendama a remarkable appearance, is the great difference in the vegetation surrounding its different parts. At the summit the traveller 'finds himself surrounded, not only with the *aralia*, begonia, and the yellow bark tree, but with oaks, elms, and other plants, the growth of which recalls to his mind the vegetation of Europe; when suddenly he discovers, as from a terrace, and, at his feet, a country producing the palm, the banana, and the sugar-cane. The true cause of this phenomenon has not been satisfactorily explained. The difference of altitude, about 175 metres, is, as Humboldt has stated, too inconsiderable to have much influence over the temperature of the air. (Researches, p. 79, &c.)

TERAMO (an. *Interamnia Prætutia*), a city of Southern Italy, cap. of prov. of same name, 947 ft. above the sea, in the angle formed by the Vezzola, where it joins the Tordino, 16 m. W. from the embouchure of the latter in the Adriatic, and 19 m. NNE. Monte Corno, the highest summit of the Apennines. Pop. 16,236 in 1862. The city was formerly surrounded by strong walls, but is now quite open. With one exception, its streets are narrow and dirty, and its houses, for the most part, mean-looking. In the outskirts, however, some of the houses are in better taste. The cathedral has been modernized. There are several convents, hospitals, and asylums. It has but few manufactures or industrial establishments; but it is the seat of the civil and criminal tribunals of the prov., and has a royal college, a seminary, or establishment for the instruction of the clergy, and is the residence of several opulent families. Its vicinity is in general fertile, producing corn, wine, and oil in abundance: in the time of the Romans its wine was in high estimation:—

'Tum, qua vitiferos domitat Prætutia pubes,
Læta laboris, agros.'

Silius Italicus, lib. xv. v. 568.

Some buried arches, the vestiges of a theatre, baths, and some other edifices, are the principal remains of the ancient city.

TERCERA. See AZORES.

TERLIZZI, an inland town of S. Italy, prov. Bari, cap. cant., on an elevated site, 18 m. W. Bari. Pop. 18,663 in 1862. Notwithstanding its size, the city possesses little worth notice beyond a superabundance of religious edifices, except a gallery of pictures, comprising works by several of the great Italian masters.

TERMINI (an. *Thermæ Himerenses*, and simply *Thermæ*), a marit. town of Italy, island of Sicily, on the N. coast of the island, intend. of Palermo, cap. district and canton, near the mouth of the river of its own name, 24 m. ESE. Palermo. Pop. 23,193 in 1862. The city is finely situated on the declivity of a hill rising from the sea; and besides being surrounded by an old wall, is farther defended, towards the sea, by a castle on a high rock, commanding the town and port. The streets are, for the most part, narrow and dirty; but it has some good public buildings, among which are several churches and convents, a royal college, 2 hospitals, an asylum for females, and convenient baths over the hot springs, for which the city has been celebrated from the remotest epoch, and from which she has derived her modern as well as her

ancient name. The town is a *caricatore*, or shipping port, and exports corn, oil, shumac, dried fruits, and manna. The sardine and anchovy fisheries are also actively carried on. The harbour, which is but indifferent, is open to the N.

About 6 m. E. by S. from Termini, are the ruins of the ancient *Himera*, near which Gelon, tyrant of Syracuse, totally defeated and destroyed an army of Carthaginians, said to have comprised no fewer than 300,000 men, commanded by Hamilcar, grandfather of Hannibal, who lost his life in the action. The Carthaginians were the allies of Xerxes, and their defeat is said by Herodotus (lib. viii. cap. 166) to have happened on the same day that the Greeks gained the victory of Salamis, anno 480 B.C. But though it is abundantly certain that Gelon gained a great victory over Hamilcar, it is extremely improbable that the forces of the latter amounted to half the number mentioned above. Hannibal never had 100,000 men at any one time under his command; and the probability is, that 30,000 would be much nearer the number of Hamilcar's army than 300,000. At a subsequent period Hannibal avenged his grandfather's disaster by taking and utterly destroying Himera. Such of its citizens as escaped the massacre which took place on this occasion, sought an asylum in *Thermæ*. (Cicero in Verrem, ii. cap. 35.) Augustus raised the latter to the rank of a colony. Stesichorus, one of the most ancient and celebrated of the Greek poets, was a native of Himera.

TERNATE. See MOLUCCA ISLANDS.

TERNI (an. *Interamna*), a town of Central Italy, prov. Perugia, in a rich and fine valley, near the right bank of the Nera (an. *Nar*),

'Sulfureâ Nar albus aquâ.'

Æneid, lib. vii. line 514.

about 4 m. W. from the famous falls of the Vellino, and 49 m. NNE. Rome. Pop. 12,818 in 1862. The town is surrounded by a wall and towers; but though it has wide streets, some tolerable buildings, and a charming situation, it is, on the whole, poor and mean, retaining but few traces of its ancient splendour. It has a cathedral with a superb altar, a hospital, a monte-di-pièta, and some other charitable foundations, a handsome theatre, and a building, erected in 1827, for the reception of the waters of the Vellino for the public accommodation. Among the remains of antiquity are some vaults of an amphitheatre constructed under Tiberius, portions of temples of the Sun and Cybele transformed into churches, and the remains of public baths. The surrounding country is extremely productive, *fecundissimos Italiæ campos* (Tacit. Annal., lib. i. cap. 79); and on the river are flour and oil mills and tanneries.

The historian Tacitus is said to have been a native of *Interamna*, but there is no evidence that such was really the case. The emperors Tacitus and Florianus are also said, but on no better grounds, to have belonged to it.

The falls of the Vellino, called the *Cascata del Marmore*, about 4 m. E. from Terni, are amongst the most striking objects of the kind that are anywhere to be met with. The total height of the fall, which is divided into three leaps, is probably (for there is the greatest discrepancy in the statements on the subject) from 650 to 750 ft. The water is conveyed to the fall in an artificial channel, more than 1 m. in length, originally dug by the consul Curius Dentatus, anno 274 B.C. (Cicero, Epist. ad Atticum, Epist. 15); but the channel having been filled up by a deposition of calcareous matter, it was widened and deepened, and in part altered, in 1596, and again in 1785. Byron has appropriated some magnificent stanzas to a notice

of these falls (*Childe Harold*, cant. iv. st. 69-72); and he adds in a note, 'I saw the Cascata del Marmore of Terni twice at different periods, once from the summit of the precipice, and once from the valley below. The lower view is far to be preferred, if the traveller have time for one only; but in any point of view, either from above or below, it is worth all the cascades and torrents of Switzerland put together.'

TERRACINA (an. *Anxur* and *Terracina*), a sea-port town of Central Italy, deleg. Frosinone, at the S. extremity of the Pontine Marshes, 59 m. SSE. Rome. Pop. 4,240 in 1862. The town, which is on the Appian Way, and adjoining the embouchure of the canal for the draining of the marshes, stands partly on low ground, and partly on the declivity of a hill. With the exception of the portion along the shore, it is ill built; and, owing to the deleterious air of the contiguous marshes, it is unhealthy, and the inhab. have a sickly appearance. On the hill is the cathedral, erected, as is supposed, on the site of the temple of Jupiter Anxurus: higher up are the ruins of the ancient Anxur—

'Impositum saxis late candentibus Anxur.'

Hor. Sat., lib. i. sat. 5.

And crowning the brow of the rock which overhangs the modern town are the ruins of the palace of Galba, repaired and reoccupied by Theodoric, commanding a magnificent view of the Pontine Marshes, Monte Circello, and of Gaeta and the Neapolitan shore, as far as Baia. Pope Pius VI. endeavoured, by improving the drainage of the marshes, and by clearing out and deepening the harbour, which had been completely filled up, to recover for Terracina some portion of its former importance. But his efforts have not had the anticipated success; and though the fishery is carried on to some extent from the port, it has little or no trade. In 1810 Napoleon I. suppressed the bishopric of Terracina.

Anxur, which was originally a town of the Volsci, subsequently became a Roman colony, and an important naval station. It was sacked by Alaric, and was occupied by the Arabs for about a century. It was also taken and sacked by a French force in 1798.

TERRANOVA (an. *Gela*), a sea-port town of Italy, island of Sicily, prov. Caletanissetta, cap. district, on the S. shore of the island, near the mouth of the river of the same name, 18 m. E. Alicata. Pop. 10,973 in 1862. The town is well situated on a bank near the sea, and has a fine palace, belonging to the Duke de Monteleone; but the streets are irregular and dirty, and its castle, churches, and convents appear to be neglected. It has a good hospital. Coarse cloth is manufactured in the town, and having a *caricatore*, or shipping station, it has some trade in the exportation of corn, wine, sulphur, and soda. The cloth made in the town finds a good market at the commercial fair held in August. The anchorage at Terranova is opposite to, and about 1 m. from, the shore, in from 7 to 11 fathoms. It is, like other places on the same coast, open to the southerly gales, which sometimes throw in a heavy sea.

Though the question be not free from difficulty, there seems every reason to think that Terranova, and not Alicata, occupies the site of the ancient Gela. It has some remains of antiquity, consisting of the foundations and mutilated fragments of a great temple, and of a Doric column. Gela was a Rhodian colony, and early attained to considerable distinction. But it is principally memorable for having given birth to Gelon, prince or tyrant of Syracuse, famous alike for his virtues, and for his

manded by Hamilcar, grandfather of Hannibal. Gela was subsequently destroyed by Phintias, tyrant of Agrigentum, and is included by Strabo among the uninhabited towns of the island. The modern town was founded by Frederick of Aragon, towards the close of the thirteenth century.

TERUEL (an. *Turdeto*), a town of Spain, cap. prov. of its own name in Aragon, on a hill, at the foot of which flows the Guadalaviar, 75 m. NW. Valencia. Pop. 5,123 in 1857. The town is walled and tolerably well built. Being a bishop's see, it has numerous churches and convents; one of the latter, belonging to the Jesuits, being the largest edifice in the town. The cathedral, an extensive building, though its architecture is not wholly in good taste, is sumptuously adorned within, and has, or, at all events, had, many fine paintings. It has several fountains, supplied with water by an ancient aqueduct. Its manufactures comprise woollen and linen fabrics, shoes, and earthenware, with fulling-mills, dyeing-houses, tanneries. The vicinity is very fertile, and near it are some celebrated warm sulphur springs.

Teruel was a fortress of some consequence under the Moors, from whom it was taken by Alphonso II. in 1171.

TESCHEN, a town of Austrian Silesia, cap. circ. and duchy of same name, on the Olsa, a tributary of the Oder, 36 m. ESE. Troppan. Pop. 8,142 in 1861. The town is well built, and has three suburbs, a ducal castle, several Rom. Cath. churches, a Lutheran church, and gymnasia for both persuasions, that of the former possessing a library of 12,000 vols. There are several other superior schools, and a military asylum. Teschen is the seat of the circle tribunal and other courts, and has manufactures of woollen cloths, cassimeres, leather, and fire-arms. Here was signed a treaty between Austria and Prussia, in 1779.

TESSIN, or **TICINO**, the most S. canton of Switzerland, between lat. 45° 50' and 46° 37' N., and long. 8° 25' and 9° 12' E., being separated by the main chain of the Alps from Uri and the Grisons on the N., while on other sides it is surrounded chiefly by the Austrian and Sardinian territories, the lakes Maggiore and Lugano forming parts of its S. frontier. Area, 1,034 sq. m. Pop. 131,306 in 1860. Most part of this canton is either mountainous, or divided into numerous valleys by alpine ramifications: in the S., however, it sinks to the level of the plain of Lombardy. The Ticino, whence this canton derives its name, has its sources in Mount St. Gothard, in the Valli Bedretto, Piura, and Blegno. Its course is generally southward, and after intersecting the canton near its centre, and traversing the Lago Maggiore in its entire length, it forms the boundary between Lombardy and Piedmont, falling into the Po at Pavia, after an entire course of about 100 m., about 60 of which are navigable. The climate of Tessin is mild; and though its pastures be not so good nor so well watered as those of the cantons N. of the Alps, its soil is generally very fertile. Agriculture is, however, extremely backward, partly from the ignorance and want of industry of the inhabitants, and partly from the too great subdivision of the surface into small properties, portions of which, at great distances from each other, sometimes belong to the same proprietors. Wheat, rye, and maize are the principal grains raised: a good deal of tobacco is cultivated. Wine is grown in many districts, but will not keep for any considerable period. The silk of Tessin is of superior quality, and a supply worth from 200,000 to 300,000 Swiss francs is sent annually into other parts of Switzerland. Most of the fruits common to Lombardy

and chestnut flour is largely used by the inhabs. The canton abounds with timber, but much of it is useless from the want of roads and expense of carriage. About 3,000 quintals a year of cheese are sent into Italy, and calves, sheep, and hogs are also exported. The chamois is a native of this canton. It sometimes breeds with the domestic goat, and the resulting progeny is greatly prized for its skin. There are scarcely any manufactures, and the trade of Tessin is chiefly in the conveyance of goods between Switzerland and Italy. A great many of the male natives of the canton emigrate to Milan, Venice, Trieste, Turin, Marseilles, and the adjacent countries, where they serve as confectioners, chocolate manufacturers, and waiters in coffee-houses, leaving the labours of the field and the care of the cattle to the women.

Tessin was merely a territory subordinate to Switzerland till 1815, when it was admitted into the Confederation, in which it holds the eighteenth rank. Its government was materially altered in 1830; when the grand council, which holds the sovereign and legislative power, was made to consist of 114 members, chosen in the different communes by all the citizens born in the canton twenty-five years of age, and who possess immovable property to the value of 200 francs, or the usufruct of such property to the value of 300 francs. It chooses its own president, and meets each year by rotation in Bellinzona, Locarno, and Lugano. The executive body, or lesser council, consists of nine members, chosen by the greater council among its members. Equality before the laws, the freedom of the press, and the right of petition are guaranteed. Tessin is subdivided into eight districts and thirty-eight circles, and the latter again into communes. In every commune there is a municipal council of from three to eleven members, with whom rests the direction of the local police. A justice of the peace sits in each circle; in each district there is a court of primary jurisdiction; and, for the whole canton, there is a supreme tribunal of thirteen members. Criminal processes appear to be more common in this than in most other cantons of Switzerland. The public revenue, principally derived from salt and customs' duties, amounted to 1,035,643 francs in 1861, and the expenditure, in the same year, to 1,219,935 francs. Contingent to the army of the Swiss Confederation, 1,804 men. The inhabs. of Tessin are of middle stature, and generally square and strongly built, though they seldom attain a great age. In many respects they resemble their Italian neighbours, and their language is a dialect of the Italian. Among them have been several eminent painters, sculptors, and architects; the latter including Domenico Fontana, who completed the dome of St. Peter's, and executed many other great works in Rome. But the bulk of the inhabs. are very backward in point of education.

TETBURY, a market town and par. of England, co. Gloucester, hund. Longtree, near the source of the Avon, 16½ m. SSE. Gloucester. Area of par. 4,980 acres. Pop. of par. 3,274, and of town 2,285, in 1861. The town consists of several streets, meeting in its centre, in which is a large market house. It is well built, the houses being mostly of stone. The par. church is a handsome edifice; having, with the exception of the tower and spire, been rebuilt in 1781. It has chapels for Independents and Baptists, a grammar school, a well-endowed Sunday school for all the poor children of the par., and an almshouse for eight poor persons. The businesses of wool-combing and wool-stapling are carried on, but to no great extent.

the sinking of several deep wells. Markets on Wednesdays; fairs, four times a year, for corn, cheese, cattle, lambs, and horses.

A fortified camp, probably of the ancient Britons, formerly existed here; and Roman coins have been frequently dug up in and near the town.

TETUAN, a town and seaport of Morocco, kingdom Fez, prov. Hasbat, on the shore of the Mediterranean, 33 m. SE. Tangier. Pop. said to amount to 15,000, of whom 9,000 Moors, 4,200 Jews, 2,000 blacks, and 800 Berbers. The town stands on the declivity of a hill crowned with a square castle, the residence of the governor. It is of considerable extent, and its walls are flanked in different parts with square forts, on which a few pieces of ordnance are mounted. Cannon are also placed on the castle, and on a square tower at the mouth of the river forming the port; but it could not oppose any effectual resistance to a European force. The streets are narrow and dirty, and as in Fez and other cities of Morocco, many are nearly covered in by the upper stories of the houses. The latter are frequently of two stories, and tolerably well built and finished; and there are several good mosques. In commercial importance Tetuan ranks next to Fez, from which place it receives the goods brought by the caravans from Tunis, Algiers, Alexandria, and Timbuctoo. Wool, corn, and other provisions, wax, hides, cattle, leather, some manufactured stuffs, and other African produce, are exported to Spain, France, and Italy, in return chiefly for European manufactures. The port of Marteen is about 2 m. from the sea, on a small river, the mouth of which is now so choked up with sand as to admit only of the entrance of small craft. The roadstead, formed by a high point of land which runs out into the sea W. of the river, is sheltered from W. winds; but during the prevalence of those from the E. vessels must retire to some other place.

TEWKESBURY, a parl. and mun. bor., market town, and par. of England, co. Gloucester, hund. Tewkesbury, on the Avon, near its confluence with the Severn, on the border of Worcestershire, 9 m. NE. Gloucester, and 126 m. NNW. London by the Midland railway. Pop. of bor. 5,876 in 1861. Area of the mod. parl. bor., which is identical with the par., 1,890 acres. It consists of two principal thoroughfares, meeting in the form of the letter Y, and from which many smaller streets branch out. The three principal streets are wide and respectable, but the other streets are inferior, and are principally occupied by the poor and labouring pop. The town is nearly insulated by the 'Mill Avon' (an ancient cut, by which the Avon has been nearly diverted from its original channel), and its tributaries the Carron and Swillgate brooks; and it is in consequence compactly built. Many of its houses are handsome, and it is well-paved and lighted with gas. The rivers encircling the town are crossed by several bridges; and, in 1826, an elegant cast-iron bridge, having an arch 172 ft. in span, was thrown over the Severn, about ½ m. from the town. The parish church, which formerly belonged to a flourishing Benedictine abbey, that grew out of a monastery founded here in 715, is a large and noble structure. Its length is 317 ft. within the walls, and that of the transept 122 ft.; the choir and side aisles are 70 ft. in breadth, and the W. front 100 ft.: the height from the area to the roof is 120 ft., and the height of the tower is 152 ft. The nave is Norman, the piers are round and very lofty; at the intersection of the cross is a very fine Norman tower, adorned with arches both within and with-

gular east end, with additional chapels and a chapter-house, all of excellent decorated character; the windows of the aisle and transepts are some decorated and some perpendicular. The W. window is perpendicular, inserted into a very lofty Norman arch of great depth, with shafts and mouldings. In the windows of the choir are considerable remains of ancient stained glass. There are some traces of the cloisters remaining on the S. side of the nave; they were perpendicular and very rich. There are several portions of very good screen-work and stalls. The abbey gate is standing, though much dilapidated. The market-house, a handsome structure, has Doric columns and pilasters, supporting a pediment in front. The town-hall, the lower part of which is used for the courts, and the upper part as a council-hall and assembly-room, was erected in 1788 by Sir William Codrington. The other public buildings include various dissenting chapels, a theatre, the borough gaol, and the corn exchange, the latter erected in 1856. Tewkesbury has a free grammar school founded in 1576, blue-coat, national, and Lancastrian schools, with almshouses, a dispensary, lying-in-charity, and several other benevolent establishments. The town formerly produced considerable quantities of woollen cloth and a superior kind of mustard. Its principal manufactures consist of cotton hosiery. Wages of the weavers vary from 8s. to 8s. a week, the average being about 6s. A few are also employed in the bobbinet-lace trade, and in the making of nails. The carrying trade up the Severn and the corn-market have declined since the improvements in the navigation at Gloucester and the construction of the railroad between Stratford and Moreton; but, on the whole, the town is still in a thriving state.

Tewkesbury has returned 2 mems. to the H. of C. since the 7th of James I. The right of voting, down to the Reform Act, was in freemen and holders of burgage tenements, of whom there were then 500. Registered electors, 877 in 1865. The mun. is co-extensive with the parl. bor. The town is governed by a mayor, 4 aldermen, and 12 councillors. It has a commission of the peace, a separate court of quarter sessions, and a court of record for debts not above 50*l*. Markets, Wednesday and Saturday.

In a field in the immediate vicinity of the town, still called, from the circumstance, the 'Bloody Meadow,' was fought, on the 4th of May, 1471, a decisive engagement between the Yorkists, under Edward IV., and the Lancastrians, under Queen Margaret and her son. The Lancastrians were totally defeated, with the loss of a great many persons of distinction, and about 3,000 soldiers left on the field. Margaret and her son having been taken prisoners, the latter was immediately assassinated.

TEXAS, formerly an independent republic of N. America, but since 1845 incorporated with and forming one of the U. States of N. America. Its limits formerly extended from the 26th to nearly the 39th deg. N. lat., and between the 93rd and 107th deg. W. long., being separated from Mexico on the W. and S. by the Rio Grande, or Bravo del Norte, and by the Red River and Arkansas river from the territories of the U. States; but the actual area of the state is 237,321 sq. m., the remaining portion being incorporated into the territory of New Mexico. The general aspect of the country is that of a vast inclined plane, gradually sloping from the mountains on the W. eastward to the sea, and intersected by numerous rivers, all having a SE. direction. The territory may be divided

spects from each other. The first, or level, region extends along the coast, with a breadth inland varying from 100 m. to 70 and 30 m. The soil of this region is principally a rich alluvium, with scarcely a stone, yet singularly free from stagnant swamps. Broad woodlands fringe the banks of the rivers, between which are extensive and rich pasture lands. The second division, the largest of the three, is the undulating or rolling-prairie region, which extends for 150 or 200 m. farther inland, its wide grassy tracts alternating with others that are thickly timbered. These last are especially prevalent in the E., though the bottoms and river valleys throughout the whole region are well wooded. Limestone and sandstone form the common substrata of this region: the upper soil consists of a rich friable loam, mixed indeed with sand, but seldom to such an extent as to prevent the culture of the most exhausting products. The third, or mountainous region, situated principally in the SW., includes the Sierra Guadalupe, a portion of the Mexican Alps, and a desert tract at the foot of the mountains. It has been little explored, and is without settlements. The mountain sides are clothed with forests of pine, oak, cedar, and a great variety of trees and shrubs, and they inclose extensive alluvial valleys, most of which are susceptible of irrigation and culture.

After the rivers already named, the principal, proceeding from N. to S., are the Neches, Trinidad, Brazos, Colorado, and Nueces. They all fall into the Gulf of Mexico, or rather (except the Brazos) into its bays and lagoons. The latter bear a considerable resemblance to the hafts along the S. shore of the Baltic, except that they are upon a much larger scale; and the coast, as Humboldt has stated, presents everywhere formidable obstacles to navigation, in the long, low, narrow belts of land by which it is fenced, and which bound the lagoons; in the want of harbours for vessels drawing more than 12½ ft. water; and in the bars at the mouths of the rivers. Still, however, steam vessels have been able to enter and ascend these rivers to a considerable distance. The Rio Grande del Norte, a noble stream, having an estimated course of 1,800 m., is, though in parts broken by rapids, an important commercial channel. Galveston Bay, into which the Trinidad flows, by far the finest on the coast, is about 35 m. in length N. and S., and from 12 to 18 E. and W. Its average depth is from 9 to 10 feet, but in the channel there are from 18 to 30 ft. water.

The Texan year is divided into a wet and a dry season. The former lasts from December to March, during which N. and NE. winds are most prevalent; the latter from March to the end of November, during which the winds vary from the SE. round to SW., may be subdivided into the spring, summer, and autumn. From April to September the thermometer in different parts of the country has been found, at a general average, to range from 63° to 100°; average heat, ■ a.m., 73° F.; at noon, 83°; 3 p.m., 77°. These great heats are, however, tempered by continual and strong breezes, which commence soon after sunrise, and continue till about ■ or 4 o'clock p.m., and the nights throughout the year are cool. From March to October little rain falls, though thunder-storms frequently occur. During the rest of the year wet weather is prevalent; the rivers swell and inundate the country, and the roads are generally rendered impassable. Snow is seldom seen in the winter, except on the mountains. The surface is in most parts covered with luxuriant native grass, comprising, with the common prairie grass, the gama, musquite, wild clover, and wild rye, and affording

of timber, as well for use as for ornament. Live oak (*Quercus sempervirens*), so valuable for ship-building, is here more abundant and of better quality, perhaps, than in any other part of America. White, black, and post oak, ash, elm, hickory, musquite (acacia), walnut, sycamore, *bois d'arc*, so called from the Indians using it to make their bows, cypress, and caoutchouc, are among the common trees; and the mountainous parts in the SE. abound with pine and cedar of fine quality. Among the natural curiosities of the country is the 'Cross-timber' of N. Texas, a continuous series of forests, varying in width from 5 to 50 m., and extending in a direct line about the long. of 97° W. from the woody region at the sources of the Trinidad, northward to the Arkansas river. It appears at a distance like an immense wall of wood, and from the W., such is its linear regularity, that it looks as if it were planted by art. It forms the great boundary of the W. prairies.

Texas is amply supplied with fruits and garden products. The climate of the lowlands is too warm for the apple, but almost every other fruit of temperate climates comes to perfection. Peaches, melons, figs, oranges, lemons, pine-apples, dates, and olives, may be grown in different localities with little cost. Grapes are abundant; and being free from the 'foxy' flavour common to the grapes of most parts of America, very tolerable wine has been made from them. Vanilla, indigo, sarsaparilla, and a large variety of dyeing and medicinal shrubs and plants, are indigenous; and on all the river-bottoms is an undergrowth of cane, so thick as to be almost impervious. Along the water-courses also and near the sea, the larger trees are sometimes wreathed with Spanish moss, which serves both for fodder and for the manufacture of cheap bedding. The flora of Texas is particularly rich and copious. Cotton is the great agricultural staple. The best cotton is produced in the low alluvial soils, and on the rolling or undulating lands.

The rearing of live stock has been long the principal and favourite occupation of the Texan settlers, and many of the prairies are covered with a valuable breed of oxen, which scarcely require, and certainly do not receive, much more care or attention than the prairie deer. It is usually estimated that 100 cows and calves, purchased for 1,000 dolls., will, in ten years, have increased about 36 fold, thus numbering 3,600, worth, at the same price, 36,000 dolls. A profitable trade in cattle is opened with New Orleans, and the West India islands offer coffee, of which the Texans use large quantities, in exchange for cattle. The rearing of horses and mules is also extensively pursued: sheep thrive on the upper lands, but require folding. Vast herds of buffaloes and wild horses wander over the prairies, and deer are everywhere abundant. Bears, cougars, peccaries, wolves, foxes, and racoons are common; and most of the planters are obliged to keep packs of large and powerful dogs to prevent the destruction of their stock.

The governor is elected for two years, and is not again eligible for a similar term. The legislative power is vested in the congress, composed of a senate and a house of representatives. The latter body consists of 66 mems., who are biennially chosen by universal suffrage, and each of whom must be at least 25 years of age, and have resided in the co. or district which he represents for the six months next preceding his election. The senators, of whom there are 21, are chosen every four years, by districts as nearly equal in free pop. as practicable. Ministers of religion are

ineligible to a seat in either house of congress. Texas is subdivided into about 40 counties. It is further divided into 10 judicial districts, in each of which is a judge. There is, also, a supreme court, with a chief and two puisne judges, chosen for six years: their salaries are 2,000 dollars a year each, no distinction being made in favour of the chief. Sessions are held once a year at Austin, the cap. of the state, commencing on the second Monday of December. The court has appellate jurisdiction within the limits of the state; but in criminal cases, and appeals from interlocutory judgments, it is under legislative regulations. Judges are nominated by the governor, and confirmed by two-thirds of the senate; they may be removed by an address of two-thirds of both houses. The judges of the district courts are chosen for six years, and hold a court twice a year in each county. The district courts have original jurisdiction in all criminal cases, and in all suits in which more than 100 dollars are at stake.

Previously to 1690, Texas formed a remote and merely nominal part of the conquests of Cortez, inhabited almost wholly by predatory Indian tribes; but in that year the Spaniards, having driven out a colony of French who had established themselves at Matagorda, made their first permanent settlement in the country. On the consummation of Mexican independence, Texas was constituted one of the federal states of Mexico in conjunction with the adjacent state of Coahuila; a union very unpopular with the Texans, and which was productive of the first disagreement with the central government. The war of separation commenced towards the end of 1835, and on the 21st of April, 1836, the independence of Texas was finally secured by the defeat of the Mexican president, Santa Anna, at San Jacinto. After a lengthened negotiation Texas was finally admitted into the American union, 29th December, 1845. In the great civil war of 1861-65, the state joined the cause of the Confederates, declaring its separation from the union by an Act of Secession, dated Jan. 11, 1861. The whole of the state was not reconquered by the armies of the United States till the spring of 1865.

TEXEL (THE), an island belonging to Holland at the entrance of the Zuyder-Zee, off the point of the Helder, at the N. extremity of the prov. of North Holland, from which it is separated by the channel, about 2½ m. across, called Mars-diep, its most southerly point being in about lat. 53° 1' N., long. 4° 46' E. It forms a canton of the arrond. Alkmaer; length N.E. to S.W. 18 m., and where broadest nearly 6 m. in width. Pop. 5,690 in 1861. The island is low, and in part marshy, but is defended from the irruptions of the sea, partly and principally, by a line of dunes, or sand-banks, which extend along its W. coast, and partly by strong dykes. The district of Eyerland (country of eggs), so called from the vast numbers of eggs deposited by the sea-fowl on its shores during the breeding season, was formerly a distinct island, having been united to the Texel by a dyke in 1630. The soil, which is extremely fertile, is mostly employed in the feeding of cattle and sheep, the latter being of a peculiarly fine long-woolled breed. The inhab., who occupy a town, Burg, in the centre of the island, and some villages, in addition to agriculture, engage in fishing and boat-building, and act as pilots. There is an excellent roadstead on the E. coast of the island, which is the usual place of rendezvous for merchantmen from Amsterdam, waiting for a favourable wind to leave the Zuyder-Zee. The number of sand banks make the approach to the island

difficult; and on the W. side it is all but inaccessible.

During a tremendous storm in February, 1825, the sea broke through the dykes by which the island is defended, and laid a large portion of its surface under water, destroying great numbers of cattle and sheep, and otherwise occasioning a heavy loss of property. The breach, however, was soon after repaired, and it is now supposed to be better protected than ever.

Several naval engagements have taken place off this island. Of these, the most celebrated was that between the Dutch fleet under the famous admiral the senior Tromp, and the English fleet under Monk, afterwards duke of Albemarle, on the 31st of July, 1653. The action was maintained with the utmost vigour on both sides, till the death of Tromp, who was shot through the heart by a musket-ball, decided it in favour of the English fleet.

THAME, or TAME, a market town and par. of England, co. Oxford, hund. Thame, on the Thame, a tributary of the Thames, 12 m. E. Oxford, and 48 m. WNW. London by Great Western railway. Pop. of town, 2,917, and of par. 3,245, in 1861. Area of par. 5,310 acres. The town consists of three principal streets, uniting in a spacious market-place. It has also a market-house, over which is the town-hall. The par. church, a large well-built cruciform structure, comprises a nave, two aisles, a N. and E. transept, a chancel, and has a fine embattled tower, supported by four meagre pillars. The interior is of noble proportions, and contains numerous monuments, but is ill laid out, and spoiled by irregular galleries. Near the church are some remains of the prebendal house of Thame, now occupied by offices belonging to the parsonage farm; and in Thame Park, about 1 m. SE. the town, considerable portions of an ancient Cistercian monastery adjoin the mansion. In 1558 Lord Williams established a free school at Thame: it is open to all boys of the par., and in trust of the warden and fellows of New College, Oxford, who nominate the master, subject to the approbation of the earl of Abingdon. It had a high character during the 17th century, but is now much fallen off. Another free school, an almshouse for five poor people, and various annual donations to the poor, exist here. The pop. is mostly agricultural; lace-making by women and children is the only manufacture. The Thame, being navigable for barges, promotes the traffic of the town, and the market is well supplied with corn and cattle.

Thame is supposed to have been a Roman station, and was of some consequence in the time of the Saxons, and during the civil wars of Charles I. The famous constitutional lawyer, Sir John Holt, chief justice of the King's Bench, was a native of this town, where he first saw the light in 1642.

THAMES, a river of England, being the largest in that part of the U. kingdom, and, in a commercial point of view, one of the most important in the world. It rises in Gloucestershire, being formed by the junction of the Isis, Lech, Colne, and Churnet, rivulets which have their sources in the Cotswold Hills. The first, which is the most important, rises on the borders of Wiltshire, a little to the SW. of Cirencester: it flows E. by Cricklade; and, being augmented by the other streams, the combined river takes the name of Thames, and becomes navigable for barges at Lechlade, on the confines of Gloucestershire and Berkshire. Its course is thence NE., till, being farther augmented by the Windrush and the Evenlode, from the borders of Gloucestershire, it

turns, a little to the N. of Wytham House, to the S. After passing Oxford, it bends suddenly to the W. by Nuneham Park to Abingdon. Having again resumed its southerly direction, it is joined, a little below Dorchester, in Oxfordshire, by the Thame.

This latter river has several sources, of which the most remote are in the central parts of Buckingham, near Kreslow and Wendon Lodge. They unite at Thame in Oxfordshire, from which point, to where it joins the Thames, it is navigable. It may here be proper to state, that, according to the common opinion, the Thames obtained its name (said to be Thame-isis, shortened to Thames) from the junction of the Thame with the Isis, or with the river coming from Gloucestershire. Probably, however, this opinion, notwithstanding its apparent accuracy, has no good foundation. At all events, it appears to be abundantly certain that the river which passes Lechlade, formed by the junction of the rivulets already referred to, has from a very remote period been called the Thamos; and that the name Isis, given to it by the literati of Oxford, is not mentioned in ancient charters or by ancient historians, and is wholly unknown to the common people in the country through which it flows. (Camden's Britannia, Gibson's edition, i. 100; Campbell's Political Survey, i. 139.)

From Wallingford, a little below the influx of the Thame, the river flows almost due S. till, passing Basildon Park, it turns E. to Reading, where it is joined by the Kennet: it then flows NE. to Great Marlow; thence S. to Maidenhead, and SE. by Windsor and Staines, till it receives the Wey. Its course is then E., with many bold sweeps, to London; and flowing through the metropolis, and being augmented by the Lea from Hertfordshire and the Darent, it continues its course E. till it unites with the sea at the Nore Light, 45½ m. below London Bridge.

The distance from London Bridge to Lechlade, where the Thames becomes navigable, following the windings of the river, is 146½ m.; the total rise from low-water mark at the former to the latter being about 258 ft. This ascent is overcome by means of several locks, constructed at different periods, of which the first is at Teddington, 18½ m. above London Bridge; this, consequently, is the limit to which the tide flows. The low-water surface of the river, from Teddington Lock to London Bridge, falls about 16 ft. 9 in., or about 10½ in. a mile, at an average. The high-water mark at Teddington is about 1 ft. 6 in. above the high water-mark at the bridge; and the time of high water is about two hours later. The average fall in the bed of the river, from Teddington to London Bridge, is about 1 ft. a mile; the breadth of the river at London Bridge is 692 ft.

Though not a rapid, the Thames is by no means a sluggish river; it rolls forward with an equable and steady current, and was formerly remarkable for the purity of its waters. It has been admirably described by Denham, in his 'Cooper's Hill':—

'Though deep, yet clear; though gentle, yet not dull;
Strong without rage; without overflowing, full.'

But it is as a navigable and commercial river, having London on its banks, and bearing on its bosom numberless ships fraught with the produce of every country and every climate, that the Thames is principally distinguished. Its depth of water is so great, that, as a shipping port, London enjoys peculiar advantages; even at ebb tide there is from 12 to 13 ft. water in the fair way of the river above Greenwich; and the mean range at the extreme springs is about 22 ft. The river is, in fact, navigable as far as Deptford for ships.

of any burden; to Blackwall for those of 1,400 tons; and to the St. Katherine's Docks, adjoining the Tower, for vessels of 800 tons. As already stated, it is navigable by barges to the confines of Gloucestershire; and the navigation is thence continued by canals through Cirencester and Stroud to the Severn; but the usual water communication between London, Bath, and Bristol is by the Kennet, which unites with the Thames at Reading. The conveyance of goods by this channel usually occupies about seven days; and the navigation is besides exposed, particularly between Reading and London, to much interruption from droughts, floods, &c. The whole course of the river, from its source to the Nore, is reckoned at from 205 to 210 m.

The removal of the old London Bridge caused a considerable change in the river above, and also, though in a less degree, below the bridge. Owing to the contracted arches through which the water had to make its way at the old bridge, there was a fall of from 4 ft. 9 in. to 5 ft. at low water: this fall is now reduced to about 2 in.; so that the low-water line above the bridge is nearly 5 ft. lower at spring tides than formerly. This effect will, probably, be increased by the new embankment; in consequence of which a greatly increased body of tidal water flows up and down the river; and, as it meets with no obstruction, it flows with a decidedly greater velocity. The effect of this is to scour and deepen the channel, which influence is sensibly felt as far up as Putney, $7\frac{1}{2}$ miles above London Bridge. The shores above the latter, that were formerly foul and muddy, are now becoming clean shingle and gravel, and, near low water, the beach is quite hard and firm. The shoals are also decreasing below the bridge; and there can be little doubt that the change will, at no distant period, be felt from the Nore up to Teddington.

Before the removal of the old bridge, a barge, starting from the pool with the first of the flood, could not get farther than Putney Bridge without the assistance of oars. But, under similar circumstances, a barge now reaches Mortlake, 4 m. farther up, before using oars, and, with a little help, she may reach Richmond, and, taking horses there, may get to Teddington in a tide. The descent down the river has been equally facilitated; the mean velocities of the flood and ebb between London Bridge and Westminster Bridge, are, flood, 8 m. an hour, extreme, $3\frac{1}{2}$; ebb, $3\frac{1}{2}$ m., extreme, $3\frac{1}{2}$.

Of the tributaries of the Thames, the Kennet, Wey, Lea, and Darent only are navigable, and are, therefore, the only ones that we need notice.

'The Kennet swift, for silver eels renowned,'

rises on Marlborough Downs, in Wiltshire, and, pursuing an easterly course, falls into the Thames at Reading. It has been made navigable as far as Newbury; whence the canal previously mentioned is carried, by Devizes and Bradford, to Bath and Bristol. The Wey falls into the Thames near Oatlands; it has its source in the eastern part of Hampshire, and has been rendered navigable from Godalming to the Thames, a distance of about 20 m. The first navigation locks used in England are said to have been constructed on this river. The Lea rises in the chalk hills near Luton, in Bedfordshire; and, preserving a southerly course, falls into the Thames near the East India Docks. It has been made navigable, by collateral cuts and otherwise, as far as Hertford. This navigation, which is of considerable importance, began to command the attention of the legislature so

not yet, however, received all the improvement and extension of which it is capable. (Priestley on Inland Navigation, p. 411.) The Darent has its source near Westerham, in Kent; it falls into the Thames about 4 m. below Dartford, to which it is navigable.

THANET (ISLE OF). See KENT.

THAXTED, a market town and par. of England, co. Essex, hund. Dunmow, on the Chelmer, near its source, 34 m. NE. London. Area of parish, 5,890 acres. Pop. 2,302 in 1861. The town is irregularly built, and, excepting its church, has no public edifice worth notice: this is a large and fine structure, in the perpendicular style, its earliest existing part probably dating from the middle of the 14th century. It is built cathedral-wise, with a transept between the nave and chancel: its internal length is 183 ft.; breadth, 87 ft.; and at its W. end is a tower, with a very rich crocketed spire, 181 ft. in height. The whole fabric is embattled and supported by strong buttresses, terminated by canopied niches and pinnacles, curiously purfled. The N. porch is richly ornamented with sculpture, and the cornice and upper part charged with various figures. Above the entrance are two escutcheons, one containing the arms of France and England, and the other those of the House of York; a part of the edifice having been constructed at the expense of Edw. IV., the rest chiefly at that of the noble families of Clare and Mortimer. 'The nave is curious, being not so wide as either of the aisles. Most of the buttresses of the aisles are enriched with panelling, and have fine pinnacles. Some of the windows are square-headed; their tracery has been much mutilated. This church had, at one time, a considerable portion of fine stained glass, which has, however, long been gradually diminishing.' (Rickman, Gothic Architecture.) The living, a vicarage, in the gift of Lord Maynard, is worth 450*l.* a year. Thaxted has meeting houses for several sects, a par. school for 50 children, an endowment of nearly 4,000*l.*, by Lord Maynard, in 1698, for general charitable purposes, and many minor charities. It was a mun. bor. till the reign of James II., when, on the corporate officers being served with a *quo warranto*, its privileges were dropped, and its former guildhall is now the workhouse.

The town is of high antiquity, its church being mentioned in the time of Edward the Confessor.

THEBES, THEBÆ, or DIOSPOLIS (the city of Jupiter), a once famous, but long ruined city of Upper Egypt, the cap. of the kingdom of the Pharaohs when in the zenith of their power, and whose remains exceed in extent and magnificence all that the most lively imagination could figure to itself. The ruins are situated in about lat. 25° 43' N., long. 32° 39' E., in the narrow valley of the Nile, stretching about 7 m. along both banks of the river, and extending to the mountains on either side. One might suppose, seeing the vast magnitude of its public edifices, that its private buildings would be in a corresponding style of magnificence; but Diodorus tells us that the Egyptians were little solicitous in respect of the latter; and, at all events, all traces of private fabrics have disappeared; and temples, palaces, colossal statues, obelisks, and tombs alone remain to attest the wealth and power of its inhabs. Thebes was undoubtedly one of the most ancient, as well as one of the greatest and most splendid, of cities. Its most flourishing period was probably from about *anno* 1700 to *anno* 700 B.C. Homer has alluded to her in terms which, but for the ruins, might

'Not all proud Thebes' unrival'd walls contain,
The world's great empress on the Egyptian plain—
That spreads her conquest o'er a thousand states,
And pours her heroes through a hundred gates;
Two hundred horsemen and two hundred cars
From each wide portal issuing to the wars.'
Pope's *Iliad*, ix. lin. 500.

Modern travellers have not been able to find any distinct traces of walls round the ruins; and the opinion has prevailed from a very remote epoch, that Homer, in the passage now referred to, did not allude to gates in the city walls, but to the gates of the different temples, or, as Pomponius Mela supposes, to the palaces of great men. (Lib. i. cap. 9.) Probably, however, the poet, by this expression, merely meant to convey a lively idea of the prodigious pop. and power of the city.

The seat of government had been removed from Thebes to Memphis (near Cairo), previously to the invasion and conquest of Egypt by the Persians under Cambyses. This event took place anno 525 B.C., when, according to Diodorus, the Persians plundered and set fire to Thebes. It appears, however, to have, in some degree, recovered from this disaster. But after the conquest of Egypt by the Greeks, their whole attention was directed to the improvement and embellishment of Alexandria, so that the cities in Upper Egypt, and especially Thebes, progressively declined in importance and pop. Its fall was accelerated by its having revolted against Ptolemy Philopater, by whom it was subsequently reduced, and given up to military execution. In Strabo's time it was only partially inhabited. In the earlier ages of the Christian era it was still of some little consequence; but for these many centuries it has been only inhabited by a few wretched Copts and Arabs, who, with bats and owls, occupy miserable hovels, mostly in the courts, and sometimes on the roofs, of the ancient structures.

The principal ruins on the E. or Arabic side of the river are those of Carnac and Luxor, about $1\frac{1}{2}$ m. apart. The first of these, which there can be no doubt is the temple of Ammon, the Jupiter of the Egyptians, is described by Diodorus as a vast structure, or rather collection of structures, the principal being erected on an artificial elevation. It has various entrances, the avenues to which have been flanked on each side with rows of sphinxes. The principal front to the Nile is of enormous magnitude, being 368 ft. in length by 148 ft. in height, with a doorway in the middle 64 ft. in height. Entering this superb gateway, and passing through a large court, we pass between two colossal statues through another propylon, entering by a flight of steps to a vast hall, the roof of which, consisting of enormous slabs of stone, has been supported by 134 huge columns. This gigantic hypostyle hall is about 338 ft. in width by $170\frac{1}{2}$ ft. in depth, so that its area comprises 57,629 sq. ft., being considerably more than $1\frac{1}{4}$ acre, or more than 5 times the area of St. Martin's Church, Trafalgar Square, London; and yet this magnificent hall does not occupy one-seventh part of the space included within the walls of the temple! (Egyptian Antiquities; Library of Entertaining Knowledge, i. 89.) The entrance to what is supposed to be the adytum of this famous temple is marked by 4 noble obelisks, each 70 ft. in height, but of which 3 only are now standing. 'The adytum consists of 3 apartments, entirely of granite. The principal room, which is in the centre, is 20 ft. long, 16 wide, and 13 high. Three blocks of granite form the roof, which is painted with clusters of gilt stars on a blue ground. The walls are likewise covered with painted sculptures of a character admirably

adapted to the mysterious purposes mentioned by Herodotus, on the subject of the virgins who were introduced to the Theban Jupiter. (Herod. i. 182.) Beyond this are other porticoes and galleries, which have been continued to another propylon at the distance of 2,000 ft. from that at the W. extremity of the temple.' (Hamilton's *Egyptiaca*.)

The great temple is supposed to have had four grand entrances, one fronting each of the cardinal points. Deducting its porticoes or propyla, the length of this stupendous structure, measured on the plan of the French savans, is 1,215 ft., and its least breadth 321 ft.; so that its area must be rather above 4 acres! And 'besides the great edifice, with its propyla, obelisks and avenues of colossal sphinxes, it has magnificent temples to the N. and S., altogether forming an assemblage of remains such as, perhaps, no other spot on earth can offer.' (Egyptian Antiquities, i. 94.) Champollion says, with reference to the ruins of Carnac, '*Là m'apparut toute la magnificence Pharaonique, tout ce que les hommes ont imaginé et exécuté de plus grand. Tout ce que j'avais vu à Thèbes, tout ce que j'avais admiré avec enthousiasme sur la rive gauche, me parut misérable en comparaison des conceptions gigantesques dont j'étais entouré. Il suffira d'ajouter qu'aucun peuple, ancien ni moderne, n'a conçu l'art d'architecture sur un échelle aussi sublime, aussi large, aussi grandiose, que le firent les vieux Egyptiens: ils concevaient en hommes de 100 pieds de haut; et l'imagination qui, en Europe, s'élance bien au-dessus de nos portiques, s'arrête, et tombe impuissante au pied des 140 colonnes de la salle hypostyle de Karnac.*' (Lettres écrites de l'Egypte, &c. 98.)

The palace of Luxor (*El kusr*, the ruins) about $1\frac{1}{2}$ m. S. from Carnac, on the same side of the river, though inferior in size to the latter, is also a structure of vast dimensions. Its principal entrance facing the N. is most magnificent. On either side the doorway stood two obelisks, or monolithes, each formed out of a single block of red granite, 80 ft. in height, about 8 ft. sq., and most beautifully sculptured. Recently, however, one of these obelisks has been taken down and conveyed at an immense expense to Paris, where it has been erected in the Place de la Concorde, but it is as little in unison with the objects among which it is now placed as a Pharaoh would be at the court of the Tuilleries, and it is to be regretted that it should have been separated from the venerable structure of which it formed so splendid an ornament. Between the obelisks and the propylon are two colossal statues, each measuring about 44 ft. from the ground. The entire palace is about 800 ft. in length, by about 200 ft. in breadth. It is in a very ruinous state; but though most part of the outer walls have been thrown down, the greater number of the columns in the interior are still standing. It is sadly encumbered with the hovels of the modern Copts and Arabs, and with the accumulated filth and rubbish of centuries. The victories of Sesostris are sculptured on the E. wing of the propylon and on other parts of the palace with infinite spirit, and the greatest amplitude of detail. 'It was impossible,' says Mr. Hamilton, 'to view and reflect upon a picture so copious and detailed, without fancying that I here saw the original of many of Homer's battles, the portrait of some of the historical narratives of Herodotus, and one of the principal groundworks of the stories of Diodorus; and, to complete the gratification, we felt that, had the artist been better acquainted with the rules and use of perspective, the performance might have done credit to the genius of a Michael An-

gelo or a Giulio Romano. Without personally inspecting this extraordinary edifice, it is impossible to have any adequate notion of its immense size, or of the prodigious masses of which it consists. In both these respects, and, combined with them, in respect to the beauty and magnificence of its several parts, it is, I should imagine, unrivalled in the whole world.' (Egyptiaca, 121.) This palace is supposed to have been founded by Amenophis Memnon, about *anno* 1650 B.C.

The ruins on the W. or Libyan side of the Nile are not less interesting than those on its E. side. About 2,500 ft. from the river are two sitting colossi, each about 50 ft. in height, and seated on a pedestal of corresponding dimensions. The probability seems to be, that the most northerly of these colossi is the statue of Memnon, which has obtained an immortality of renown, from its being believed to have emitted a sound when it was first struck by the rays of the morning sun. Champollion (*Lettres écrites de l'Égypte*, p. 307) has, however, shown from the hieroglyphics on its back, that this famous statue really represents the Pharaoh Amenophis II., who reigned about *anno* 1680 B.C. These statues are supposed, by the same distinguished authority, to have decorated the façade of the principal front of the celebrated structure, the *Ameinophon* of the Egyptians, and *Memnonium* of the Greeks. But if such be really the case, the destruction of this building has been incomparably more complete than that of any one else of the famous structures belonging to the city; and it is now, indeed, next to impossible to form anything even like a ground-plan of the ruins.

Between Medinet-Abon and Kournak are the remains of a noble building, about 530 ft. in length and 200 ft. in breadth, supposed by some to be the tomb of Osymandes, described by Diodorus, but which has been more generally supposed to be the Memnonium. Champollion, however, has shown that neither of these suppositions is correct, and that it was built by, and had in fact been the residence of, Rhamstes the Great, or Sesostris, the most illustrious of the Egyptian monarchs. The *Rhamesseion*, for such is its proper name, is very much dilapidated; but its immense and noble proportions, and the beauty of its sculptures, make it one of the most interesting, as well as magnificent, of Theban structures. Between the propylon and the front of the palace, a distance of about 56 paces, are the fragments of a stupendous colossal statue of Rhamstes the Great. It has been broken off at the waist, and the upper part is now prostrate on the ground. This enormous statue measures 63 ft. round the shoulders, and 13 ft. from the crown of the head to the top of the shoulders. The barbarian energy exerted in its destruction has been such, that nothing of the general expression of the face can now be discerned; and, as Mr. Hamilton has truly stated, 'Next to the wonder excited by the boldness of the sculptor who made it, and the extraordinary powers of those by whom it was erected, the labour and exertions that must have been used for its destruction are the most astonishing.' (P. 167.)

It would be to no purpose to attempt giving any account of the innumerable hieroglyphics, pictorial tablets, and bas-reliefs on the ruins of the Rhamesseion. They principally relate to the triumphs of its illustrious founder, and his adoration of the gods of his country. The author of 'Scenes and Impressions in Egypt' alludes as follows to the representation of the victories of Sesostris:—'The hero, as compared with the rest

his chariot; his horses on their speed—a high, cloud-pawing gallop; his arrow drawn to the head; the reins fastened round his loins: you have the flight of the vanquished; the headlong fallings of the horse and the chariot; you have the hurrying crowd of the soldiers on foot; a river; drowning; the succouring of warriors on the opposite bank; and, in a compartment beyond, you have a walled town; a storm; the assailants climbing ladders; the defenders on the parapet; the upheld shield; the down-thrust pike; a sad but yet a stirring picture, bringing to your mind many a historic scene, alike memorable and melancholy.' (P. 95.)

The following, according to Champollion, is the dedication of the great hall of the palace, sculptured in the name of the founder, in beautiful hieroglyphics, upon the architraves of the left side:—

'Harokeris, all-powerful, the friend of truth, the lord of the upper and lower regions, the defender of Egypt, the castigator of countries; Horus, the resplendent possessor of the palms, the greatest of conquerors, the king-lord of the world, sun, guardian of justice, approved by Ptah, the son of the Sun, the well-beloved of Ammon; RHAMSTES, has caused these structures to be erected in honour of his father Ammon-Ra, king of the gods. He has caused to be constructed, in good white sandstone, the great hall of assembly, supported by large columns with capitals imitating full-blown flowers, and flanked by smaller pillars with capitals imitating a truncated bud of the lotus; and he has dedicated the hall to the Lord of Gods, for the celebration of his assemblies: this is what the king ever living has done.' (*Lettres d'Égypte*, p. 278; we have used the translation given in the art. on 'Egypt' in the new ed. of the 'Encyc. Britannica.')

The tombs of the kings of Egypt in the valley or rather rocky ravine of Biban-el-Muluk, to the SW. of the ruins on the W. side of the river, are not less extraordinary than the structures previously noticed. They have been described as follows in the elaborate and learned article on 'Egypt' now referred to:—

'The site chosen for the royal necropolis appears to be eminently suited to its melancholy destination; for a valley or ravine, encased as it were by high precipitous rocks, or by mountains in a state of decomposition, presenting large fissures, occasioned either by the extreme heat or by internal sinking down, and the backs of which are covered by black bands or patches, as if they had been in part burned, is a spot which, from its loneliness, desolation, and apparent dreariness, harmonises well with our ideas as to the most fitting locality for a place of tombs. No living animal, it is said, frequents this valley of the dead; even the fox, the wolf, and the hyena, shun its mournful precincts; and its doleful echoes are only awakened at intervals by the foot of the solitary antiquary, led by inquisitive curiosity to pry into the very secrets of the grave. The catacombs, or *hypogæa*, are all constructed on nearly the same plan; yet no two of them are exactly alike; some are complete, others appear never to have been finished, and they vary much in the depth to which they have been excavated. In general, the entrance is by the exterior opening of a passage 20 ft. wide, which descends gradually about 50 paces, then expands, whilst the descent becomes more rapid, and is continued for some distance farther. On either side of this passage is a horizontal gallery, on a level with the lowest part of the first descent:

* This article was written by the late Dr. Brown of Edinburgh and is a favourable specimen of his great

at the interior extremity there is a spacious and lofty apartment, in the centre of which is placed the royal tomb; and beyond this there are commonly other small chambers at the sides, whilst in some cases the principal passage is continued a long way into the rock. The royal tomb is for the most part a sarcophagus of red or grey granite, circular at the one end, and square at the other; but where there is no sarcophagus, a hole or grave is discovered, cut in the rock to the depth of from 6 to 30 ft., and which appears to have been covered by a granite lid. Almost all the lids, however, belonging to the graves excavated in the rock have either been removed or broken. In those sepulchres which have been finished, the walls from one end to the other are all covered with sculptures and paintings, executed in the best style of ancient art; and owing to the unparalleled dryness of the atmosphere in Egypt, the colours, where they have not been purposely damaged, are as fresh as when first laid on. The labours of Belzoni in exploring these tombs, and the success with which they were rewarded, are well known. Strength and resolution as herculean and inflexible as his were required to overcome the suspicions of the Arabs, the want of mechanical aid, and the heat and closeness of the caverns; but his perseverance was amply recompensed by the discovery of six tombs in this hypogean city of the dead. The most remarkable of these, with all its galleries, is upwards of 300 ft. in length, and is called by Belzoni the tomb of Apis, from his having found the mummy of a bullock in one of its chambers. In another apartment was a magnificent sarcophagus of white alabaster, almost as transparent as crystal, and the whole excavation, sculptured and painted in the most finished style of art, was in the most perfect preservation. These catacombs, as already stated, were the sepulchres of the kings of the three Diospolitan dynasties; and accordingly, by means of the hieroglyphical inscriptions, Champollion discovered the tombs of six kings of the 18th dynasty; that of Amenophis-Memnon, the most ancient of all, in an isolated part of the valley towards the W.; and, lastly, those of Rhamses-Meamoun, and six other Pharaohs, his successors, belonging either to the 19th or 20th dynasty. No sort of order, either in regard to dynasty or succession, appears to have been observed in the choice of situations for the different royal tombs; on the contrary, each sovereign seems to have caused his own to be dug wherever he found a vein of stone adapted for the purposes of sepulture, and the immensity of the projected excavation. The royal catacombs, however, which have been thoroughly completed and finished, are but few in number: these are, the tomb of Amenophis III., or Memnon, the decoration of which has been almost entirely destroyed; that of Rhamses-Meamoun; and of Rhamses V.; probably also that of Rhamses the Great; and, lastly, that of Queen Thaosis. All the others are incomplete. The tomb of the great Rhamses, or Sesostris, still exists, according to M. Champollion, and is the third on the right of the principal valley; but it has sustained greater injury than almost any other, and is filled nearly to the ceiling with rubbish.

Such is a very brief and imperfect notice of some of the more important ruins scattered over the site of this ancient capital of the Pharaohs—*'veterum Thebarum magna vestigia.'* (Taciti Annal., lib. ii. cap. 70.) Their vastness is such as almost to stagger belief; and the traveller who finds himself among these gigantic monuments of remote antiquity feels an almost overpowering

tremely difficult to form any apparently satisfactory conclusions as to the means which the Theban monarchs must have put in motion to raise such stupendous edifices. Their extraordinary magnitude, the size and hardness of the blocks of stone (usually granite) of which they are built, and the countless numbers, depth, and nicety of the hieroglyphics and pictorial tablets with which they are profusely covered, must have occasioned the employment of an enormous quantity of labour, and an all but boundless expense. Most probably the work was principally executed by slaves, or by requisitions of compulsory labour furnished by subjugated countries; but, in whatever way it may have been effected, it must, especially when we consider the limited advance then made in mechanical science, have involved an outlay which only a very great revenue could have sufficed to meet.

It is impossible to form any just idea of what Thebes must have been in the days of her glory, previously to the Pharaohs leaving her palaces for those of Memphis, while her porticoes were crowded with merchants and merchandise, and before

'Relentless war had pour'd around her wall.'

Thebes had little in common with most ancient, and still less with most modern, cities. She in fact was, as it were, the capital of a by-gone world, of which we know little or nothing save what may be learned and conjectured from her own monuments.

THEBES, or THIVA, a famous city of ancient Greece, the capital of Bœotia. The modern town is of comparatively limited dimensions, being confined to the eminence occupied by the acropolis of the ancient city, and the cap. of a prov. of the same name, 29 m. NNW. Athens. Pop. 5,170 in 1861. When seen from a distance, the modern town still assumes the appearance of a considerable city. Prodigious ramparts and artificial mounds appear on its outside; it is surrounded by a deep fosse, and the traces of its old walls may yet be discovered. But the contrast between its external and internal appearance is most striking. The streets are narrow and dirty, the houses being either constructed of the ruins of ancient edifices, or mere wooden hovels. It retains very few traces of its ancient magnificence, and the sacred and public edifices mentioned by Pausanias and others have wholly disappeared. It is now however, as of old, extremely well supplied with excellent water.

The ancient city of Thebes, or rather its citadel, is said to have been founded by Cadmus (and hence called *Cadmeia*), a Phœnician, or perhaps Egyptian, adventurer, who introduced the knowledge of letters into Greece, anno 1549 B.C. (Larcher, *Chronologie d'Hérodote*, p. 569.) Its walls were constructed at a later period by Amphion and Zethus, the former of whom is believed to have been the earliest of Greek musicians, and hence

*'Dictus et Amphion, Thebæ conditor arcis,
Saxa movere sono testudinis, et prece blandâ
Ducere quo vellet.'*

Hor. Ars Poet., lin. 394.

The city had seven gates; its circ. is variously stated at from 43 to 70 stadia, and its pop. might perhaps amount to about 50,000. It had many magnificent temples, theatres, gymnasiums, and other public edifices, adorned with noble statues, paintings, and other works of art. Its government, like that of all other Greek cities, was fluctuating and various. Originally it was subject to kings or tyrants, and after the republican go-

and democratical parties alternately prevailed. Owing to her proximity to Athens, from which, of course, she had everything to fear, Thebes was for a lengthened period what may be called the natural enemy of Athens, and during the Peloponnesian war was the most efficient ally of Lacedæmon. But after the failure of the expedition against Syracuse had broken the power of Athens, and Thebes had no longer any fear of her hostility, dissensions began to spring up between her and Lacedæmon, and the Thebans, under their great leaders Pelopidas and Epaminondas, acquired a decided superiority over the latter, and became for a short while the leading Greek state.

After the battle of Chæronea, in which the Thebans bore a principal part, Philip placed a garrison in the citadel of Thebes; but, on his death, the Thebans rose in arms against his son, Alexander the Great. The latter, however, having taken the city by storm, *anno* 335 B. C., rased it to the foundations, the house that had been occupied by Pindar being alone excepted from the general destruction; such of the inhabs., amounting, it is said, to 30,000, as had not been killed, being at the same time sold as slaves. (See Mitford's *Greece*, vii. 339, 8vo. ed., and the authorities there quoted.)

But about twenty years after this catastrophe, the city was rebuilt by Cassander, when the Athenians, forgetting the ancient animosities that had subsisted between them and the Thebans, generously contributed towards the reconstruction of the walls. Subsequently the city underwent many vicissitudes. It appears to have suffered from the exactions of Sylla. Strabo calls it a poor village (*lib. ix.*); and Pausanias, who describes its temples and other remains, says, that, with the exception of the temples, the lower town was wholly destroyed. (*lib. ix. cap. 7.*) The fertility of the surrounding plain, which produces corn, wine, and oil in the greatest abundance, and the excellence of the air and water, appear to have been the principal cause why Thebes has been able to survive so many disasters, and is still a considerable and increasing town.

Thebes is particularly famous in the early and heroic ages of Greek history. '*Nec cedentes Athenis claritate, quæ cognominantur Beotie Thebæ, duorum numinum, Liberî atque Herculis, ut volunt, patria.*' (*Plin. Hist. Nat., lib. iv. cap. 7.*) The stories, also, of Laius, Jocasta and Oedipus, and their unfortunate progeny, and of the wars of the seven chiefs and their descendants, the Epigoni, against Thebes, have supplied topics of the deepest interest that have engaged the attention of the greatest poets of antiquity and of modern times.

The air of the Beotian plain is less pure than that of Attica, and this circumstance was pretty generally believed in antiquity to be the cause of the dulness of the Thebans, who, speaking generally, wanted the quickness, penetration, and vivacity that distinguished the Athenians. But this difference of character was probably owing rather to a difference in the education and institutions of the two people than to any difference of soil or climate. In respect of illustrious men, Thebes need not fear a comparison with any city of ancient or modern times. The names of Hesiod and Pindar, of Pelopidas and Epaminondas, are alone sufficient to illustrate and ennoble a nation. It was, indeed, as already stated, the extraordinary talents and virtues of the latter that raised his country to a preponderating influence in the affairs of Greece. It deserves, also, to be mentioned, to

tice, tolerated in other Greek states, of exposing children at their birth, was forbidden in Thebes.

THEISS (an. *Tibiscus*), a great river of Hungary, being the most important of the tributaries of the Danube, parallel to which it flows in the lower part of its course through the great Hungarian plain. It has its sources in the Carpathian Mountains, on the confines of the Bukowine, within a short distance of the sources of the Pruth, in about lat. $48\frac{1}{2}^{\circ}$ N., long. $24\frac{1}{2}^{\circ}$ E., being formed by the junction of two streams, the Black and the White Theiss. Its course, which throughout is extremely tortuous, is first generally WNW. to Tokay, from which point it flows with innumerable windings, SSW. and S., till it enters the Danube, nearly opposite to Salankement, in lat. $45^{\circ} 10'$ N., long. $20^{\circ} 23'$ E., after a course of at least 500 m., taking only its more important windings into account, for the greater part of which it is navigable. It constitutes the line of separation between 2 of the 4 great divisions of Hungary, thence called Hungary-on-this-side- (or N. and W.), and Hungary-beyond- (or S. and E.) the Theiss. Its chief tributaries are the Bodrog, Schajo, with the Hernad, and Zagyva on the right, and the Szamos, Körös, Maros, &c., with the other principal rivers of Transylvania, on the left. The area of its basin is estimated at upwards of 6,000 sq. m. The traffic on the Theiss was formerly confined to the conveyance downwards of salt (from the co. Marmaros, in which it rises), and of timber in rafts, but in recent years steam navigation has been established, which has greatly added to the prosperity of the adjoining provinces. The slow muddy waters of the Theiss seem to suit the fish better than those of any other river in Hungary. It is said that, after an overflow, they have been left in such quantities as to be used for feeding the pigs, and manuring the ground. The sturgeon of the Theiss, though smaller than that of the Danube, is remarkable for its fatness and delicate flavour.

THERMOPYLÆ (from *θερμός*, hot; and *πύλη*, a gate, or pass); a famous defile on the shore of the Malian Gulf, on the NE. coast of Greece, near the mouth of the Hellada (an. *Sperchius*), between the steep precipices at the E. termination of Mount Eta and the sea, in about lat. $38^{\circ} 52'$ N., long. $22^{\circ} 39'$ E. The defile is about 5 m. in length, and, where narrowest, was not, anciently, more than 60 paces across. '*In cuius valle ad Maliacum sinum vergente iter est non latius quam sexaginta passus. Hæc una militaris via est, qui traduci exercitus, si non prohibeantur, possint.*' (*Liv. lib. xxx. cap. 15.*) At present the only practicable road through the strait is by a narrow causeway, on either side of which is an impassable morass, bounded on the one side by the mountains, and on the other by the sea. This pass is now, as in antiquity, the principal, and, indeed, almost the only road by which Greece can be entered from the NE.; and as it may be defended by a comparatively small force, its occupation is of the utmost importance for the defence of the country. At the narrowest part of the pass are hot springs, a circumstance which, as seen above, has given the defile its peculiar name.

It was in this pass that, *anno* 480 B. C., the Spartan king Leonidas, with about 4,000 Greeks, resisted for a while the whole force of the Persian army invading Greece under Xerxes. After the Persians had succeeded in opening a passage by another route across the mountains, Leonidas, having dismissed almost all the other Greeks, devoted himself with 300 Spartans, in obedience to the laws, which forbade Spartans, under what-

agreeably to the answer of the oracle, a sacrifice to insure the independence of his country. (Herodotus, lib. vii. cap. 210-228.) This event has given Thermopylæ all its interest, and will make it be held in 'everlasting remembrance.' After the final defeat of the Persians a magnificent monument, the ruins of which still remain, was erected in honour of Leonidas and his heroic companions. It had an inscription, said by Cicero, by whom it has been translated, to have been written by Simonides (Tuscul., i. cap. 42), and which has been rendered into English as follows:—

'To Lacedæmon's sons, O stranger, tell
That here, obedient to their laws, we fell.'

The ground near the Sperchius, on which the army of Xerxes was encamped during the attack on Thermopylæ, could not possibly have accommodated his troops had their numbers approached to any thing like those specified by Herodotus. But there cannot be so much as the shadow of a doubt that these are grossly, and, indeed, ludicrously, exaggerated. To suppose, as is stated by the venerable father of history, that the army which Xerxes led to Thermopylæ and his fleet comprised 5,283,220 troops, sailors, and male followers of all descriptions (Herod., lib. vii. cap. 187), exclusive of women and eunuchs, is a palpable absurdity. It may be confidently affirmed that no such force ever was brought together, and that if it were it could neither be fed nor kept together for the shortest period. The statements of Herodotus are founded merely on rumour, which is always sure to exaggerate that which is really great; and the Greeks were particularly prone to magnify their exploits beyond all reasonable bounds.

THETFORD, a parl. and mun. bor. of England, chiefly in the co. Norfolk, but partly in Suffolk; being separated by the little Ouse into 2 unequal parts, at the intersection of the roads from Newmarket to Norwich, and from Rottesdale to Lynn; 26 m. SW. by W. Norwich, and 95 m. NE. London by Great Eastern railway. Pop. of bor. 4,208 in 1861. Area of parl. bor., which comprises the 8 pars. of St. Cuthbert, St. Mary, and St. Peter, 8,270 acres. The town is straggling, and irregularly built, with little trade or manufactures; but it does not appear to be decaying, and has a clean and respectable appearance. It has, however, increased in late years very little beyond its former limits. St. Peter's, called the 'black church,' from being constructed mostly of flint, was principally rebuilt in 1789; it is provided with buttresses and battlements. The guildhall is a fine old building, erected in the time of Charles II. The market-house, roofed with iron; the jail, a large but ill contrived building; the bridewell, workhouse, several dissenting chapels, and a theatre, occasionally opened, are the other principal buildings. A hospital for two poor men and two women, and a free grammar school, were established in the reign of James I.; and it has, besides, almshouses founded in 1680, a national school, funds for apprenticing poor children, and many minor charities. Thetford is governed by a mayor, 3 aldermen, and 12 councillors: its earliest extant charter is of William III. It has no commission of the peace, but petty sessions and a court of record are held weekly. The corp. revenue is principally derived from the tolls on navigation from Thetford to White House Ferry, under local acts. Thetford has sent 2 mems. to the H. of C. since the reign of Edward VI.; previously to the Reform Act the right of voting was vested in the mayor, bur-

gesses, and commonalty. The limits of the parl. bor. were not affected by the Boundary Act. Reg. electors, 223 in 1865. The town is a polling-place for the W. div. of Norfolk.

Thetford is generally supposed to occupy the site of the *Sitomagus* of the Romans. During the Heptarchy it was the cap. of the East Anglian kingdom, and on the E. side of the town are remains of intrenchments supposed to date from that period. In the time of Canute a convent was founded in the town, some remains of which are still extant. The gateway of a priory, founded in 1104, and some traces of a monastery, established at a later period, may also be seen. In the reign of Edward III. it is said to have had 24 principal streets, 5 market-places, 20 churches, 8 monasteries, and 6 hospitals, besides other public foundations; but these statements are of doubtful authenticity, and are probably much exaggerated. It has been occasionally visited in more modern times by some of the British sovereigns, particularly James I., who had a hunting-seat in the neighbourhood. Among the natives of Thetford who have attracted notice, the most celebrated by far was Thomas Paine, author of the once famous but now forgotten pamphlets, entitled 'Common Sense,' 'Rights of Man,' 'Age of Reason,' &c. Paine was born on the 29th of January, 1737; his father, who was a staymaker in Thetford, belonged to the Quakers.

THIBET, or TIBET (native *Toup'ho*, *Bhote*, and *Puë-kouchim*, 'snowy region of the north'), a very extensive region of Central Asia, mostly comprised within the Chinese empire, between lat. 22° and 31° N. and long. 72° and 104° E., having N. Chinese Turkestan and the desert of Cobi; E. the Chinese prov. of Se-tchuen; S. Yun-nan; N. Birmah, and the Great Himalaya, separating it from Assam, Bootan, Sikkim, Nepaul, and the upper British provs.; and W. the Punjab territories N. of the Himalaya, Budukh-shan, the Beeloot Tagh Mountains, &c. The W. parts of this vast tract, called Little Thibet (including Ladakh, Lé, Baltee), appear, however, to be independent of China. Its boundaries on every side but the S. being so uncertain, and our knowledge of the country so limited, it is impossible to form anything like an accurate estimate either of its area or pop. Thibet, though it does not include the highest summits of the Himalaya, comprises a large portion of the elevated table land in the centre of the continent, with the sources of almost all the great rivers of S. Asia, including the Indus, Sutleje, Ganges, Brahmaputra, Irrawadi, Thanlweng, and Mcnam-kong or river of Camboja, as well as those of the great Chinese rivers, the Yangtse-kiang, and Hoang-Ho. Its mountain-chains generally run parallel to the Great Himalaya, of which Thibet is the N. slope; but some are said to stretch in a NE. direction to the frontiers of Koko-nor, and others extend from N. to S. between the valleys of the great rivers in the SE. Thibet has numerous lakes; the chief are the Tengkirinor, the largest, about 110 m. NW. Lassa, and the lake Palte or Yamo-rouk, S. of the San-po river, which surrounds in the form of a ring a large island of a shape similar to its own.

According to Mr. Turner (Thibet, p. 216), there is a very striking contrast in the face of the country in passing from Bootan into Thibet. 'Bootan presents to the view mountains covered with perpetual verdure, and rich in forests of large and lofty trees, while not a slope or narrow slip of land between the ridges lies unimproved. Thibet, on the other hand, strikes a traveller at first sight as one of the least favoured countries under heaven,

culture. It exhibits only low rocky hills, without any visible vegetation, or extensive arid plains, both of the most stern and stubborn aspect, promising full as little as they produce. Its climate is cold and bleak in the extreme, from the severe effects of which the inhabs. are obliged to seek refuge in sheltered valleys and hollows, or amidst the warmest aspects of the rocks. Yet the advantages that the one country possesses in fertility and in the richness of its forests and fruits, are amply counterbalanced in the other by its numerous flocks and invaluable mines. As one seems to possess the pabulum of vegetable, in the other we find the superabundance of animal life. The variety and quantity of wild-fowl, game, and herds of prey, flocks, droves, and herds in Thibet are astonishing. In Bootan, except domestic creatures, nothing of the sort is to be seen.'

The same division of the seasons prevails here as in Bengal. The spring, from March to May, is marked by a variable atmosphere, heat, thunderstorms, and occasionally refreshing showers. From June to Sept. is the damp season, when heavy and continued rains throughout most parts of the country swell the rivers, which bear off the surplus waters to augment the inundation of Bengal. From Oct. to March a clear and uniform sky succeeds, seldom obscured either by fogs or clouds, and for the first three months of this season a degree of cold is felt, among the lofty mountain ranges of the S., far greater, perhaps, than is known to prevail in Europe.

This region is remarkable at all seasons for the dryness of the winds, and meat and fish are prepared for carriage to any distance, and will keep to any season of the year, by being dried up by exposure to the frosty air. Vegetation is frequently dried to brittleness, and every plant may be rubbed between the fingers into dust. Goitre, syphilis, and smallpox appear to be the most severe diseases in Thibet, and, unfortunately, are very prevalent. Syphilis is said, by an English surgeon, to make a more rapid progress, and rage with more violence here than in any other country. (Saunders, p. 410.) Catarrhs and rheumatism are more frequent than in Bengal.

Of the geology of Thibet there exist only scattered notices. Moorcroft found that the hills in parts of Little Thibet consisted apparently of clay-slate, fragments of granite and quartz being strewn upon their sides. (Moorcroft's Travels, i. 439.) The latter rocks, with primary limestone, talc, and similar formations, seem to enter most largely into the mountain ranges, where they are often interspersed with beds of clay and sand, and occasionally of chalk. Tincal is obtained in inexhaustible quantities; rock salt is met with in many parts, and nitre effloresces abundantly on the surface of the soil. Gold is found in lumps and irregular veins, or in the form of dust in the rivers, and is frequently of great purity. There are mines of lead, silver, copper, and cinnabar, but few if any of iron, though chalybeate springs are very frequent. The difficulty of procuring fuel for smelting the less valuable ores proves an insuperable obstacle to success in mining: timber of all kinds is rare, and the dung of animals is the only substitute for fire-wood. The discovery of a coal mine would be an invaluable acquisition to Thibet.

The usual crops are barley, coarse pease, and wheat. The first forms by far the largest proportion of the whole; wheat never enters into the food of the poorer classes, and rice is not cultivated. A brief notice of the agriculture and vegetable products of Little Thibet will be found under the article LADAKH. Turnips and radishes are almost the only garden vegetables, and fruits are of little

variety. For most vegetable products, and, indeed, medicinal plants, Thibet is dependent on Bootan, Nepaul, and the other countries S. of the Himalaya.

Among the useful animals of Thibet, sheep merit a distinguished rank. The flocks of these are numerous, and upon them the chief reliance of the inhabs. is placed. A peculiar variety, which seems indigenous to the country, is of small size, with black heads and legs, and soft wool; their mutton, which is almost the only animal food used in Thibet, being said to be the finest in the world. The sheep are occasionally employed as beasts of burden, being laden with salt and grain. They are the bearers of their own coats to the best marts, where the wool is usually made into a narrow cloth resembling frieze or thick coarse blanketing. The skins of both sheep and lambs are commonly cured with the wool on; and, in order to secure a silky softness of the fleece, the ewes are sometimes killed before their time of yeanning, when their skins bear a high price in China and all over Tartary. The Thibet goat (*Capra hircus*), which affords the valuable material for the shawl manufacture, feeds, like the sheep, in large numbers together. These are perhaps the most beautiful among the whole tribe of goats. Their colours are various; black, white, of a faint bluish tinge, and of a shade something lighter than a fawn. They have straight horns, and are of a lower stature than the smallest sheep in England. The material used for the manufacture of shawls is of a light fine texture, and clothes the animal next the skin. A coarse covering of long hair grows above this, and preserves the softness of the interior coat. The creature is, no doubt, indebted for the warmth and fine quality of the latter to the nature of the climate and country it inhabits. On removing some of the goats to the hot atmosphere of Bengal, Turner says they quickly lost their beautiful clothing, and a cutaneous eruptive humour soon destroyed almost all their coat. He was also unsuccessful, after repeated trials, in attempting to acclimatise the animal in England. (Turner's Thibet, p. 356.) Recently, indeed, the Thibet goat has been naturalised in France; but it is quite certain, from the great difference of the climate, that the wool will, in no long time, lose all its distinguishing and most valuable qualities. The most valuable species of cattle is the yak, or grunting ox (*Bos gruniens*), which is also indigenous to the country. Their cows supply an abundance of rich milk: they are very useful as beasts of burden, and throughout Hindostan their bushy tails are in great request as chowries to drive away flies, &c. For agricultural labour, small cattle, like those of Bengal, are chiefly employed. Most of the native animals of Thibet, as the hare, bharal (*Ovis ammon*), dog, &c., have long furry coats. Among the wild animals, perhaps the most curious is the musk deer, which delights in excessive cold. It is about the height of a moderately-sized hog, which it closely resembles in the figure of the body. It has a small head, a thick and round hind quarter, no tail, and extremely delicate limbs. The hair with which it is covered is prodigiously copious, and grows erect all over the body, in some parts to between two and three inches in length, thin, flexible, and undulated. Its colour at the base is white, in the middle black, and brown at the points. The musk is a secretion formed in a little bag at the navel, and found only in the male. The musk deer, valuable for this product, is deemed the property of the state, and is hunted only by permission of government.

At the end of the last century, the valley of Jhansu in Thibet was particularly famous for the

manufacture of woollen cloth, for which there was an extensive demand. The cloths, which were confined to two colours, garnet and white, seldom exceeded half a yard in breadth, and were woven very thick and close. A good deal of cloth is also said to be made at Lassa, great quantities of a red colour being annually exported into China. Moorcroft (Travels, p. 71-74) describes the process of weaving at Piti, in Little Thibet, as follows:—The two ends of the warp are fastened together, and it is then stretched upon two rods, one fixed to the body of the weaver (who is invariably a woman) by a cord, which admits of the work being loosened or tightened at pleasure, and the other well fastened to some stones at a distance, equal to half the length of the cloth. The whole is close to the ground, on which the workwoman sits, but the portion close to her is slightly elevated by a third rod; loops, each including a thread, and received upon a small stick like a rattan, supply the place of a heddle: of these there are three sets, which draw up parts of the warp alternately as required. A large heavy mesh, into which a thin bar of iron is inserted, is a substitute for the reed, and three or more heavy strokes are made with its armed edge upon every thread of the wool. The last instrument must be taken out after the insertion of each piece of yarn, and when placed perpendicularly, with its two edges separating the warp, abundance of room is given for the passage of the balls of worsted made use of without the covering of a shuttle. This part of the process is tedious, but the warp is prepared in a quick and simple way: several pegs are driven into the ground, so near each other that the whole may be reached without any material movement of the body; the yarn is fastened to one of them, and carried on round the others till a sufficient quantity has been wound; all are then taken out except three, which have their places supplied by rods, and the warp only requires spreading. Every woman knows how to weave, but only half their number may be considered as employed in the manufacture, for if a house contain two, one is usually busy in domestic affairs. Twenty-six thousand yards, 17 inches wide, may be fabricated annually in the Piti district, of which about half is exported. Further N. a coarse loom is in use, not very unlike that common in Europe. Several varieties of cloth are manufactured: some thick and heavy, with a long nap, others fine. All the wool used is of a coarse kind, and in consequence the finer cloths have a hardness, something similar to that of camlet or plaid, to which they are little inferior. Very good sacking is also made of the hair and wool from the yak.

Thibet has, from time immemorial, been a country of considerable traffic; but here, as in Bootan, foreign trade is monopolised by the government, and a few of the first officers of state. The commerce is principally with China, the Chinese trade being carried on partly at Sin-ning, a garrison town on the W. frontier of China, and partly at Lassa, by caravans which come there in October. These consist of 500 or 600 persons, who bring goods on cattle, mules, and sometimes horses, exchanging tea, silver bullion, brocades, and fruits, for fine and coarse woollen cloths, gold dust, and Bengal goods. The imports from China are large, consisting principally of tea, and, next to it, of tobacco, quicksilver, cinnabar, furs, porcelain, musical instruments, European cutlery, pearls, and coral. From Bootan and Bengal, Thibet receives English broad-cloths, piece goods, Allahabad cloth, kincots, coarse sugar, tobacco, indigo, paper, rice, sandal wood, spices, gums, and other skins. Many of these articles come through Nepaul, which re-

ceives all its Chinese imports through Thibet. The trade with Assam is very limited, but small quantities of rice, coarse silk, iron, and sticklac are imported; from Turkestan come horses and camels. From Ladakh E. Thibet receives dried fruits, shawls, gamboge, and saffron. The general returns of Thibet are in gold dust, silver, tincal, musk, woollen cloths, goat and lamb skins, and rock salt; the goats' hair is almost all sent through Ladakh to Cashmere for the manufacture of the Cashmere shawls.

In Little Thibet traffic is carried on chiefly by barter, and money is almost unknown. Salt, wool, turquoises, sheep, and goats are imported from Chan-than, or Chinese Thibet, and are paid for with grain, woollen cloth, and horses. From Bisahar and Kulu (to Piti) come iron, cooking utensils, brass, copper, tobacco, rice, dried fruits, tea-cups, timber, and amber, paid for in a similar way. The iron and metal vessels of the S. are sent to Lé, in exchange for tea, coarse cloth, coral, and dyeing drugs. Further details respecting the trade of Little Thibet will be found in the art. **LADAKH**.

The modes of conveyance in Thibet differ altogether from those of Bootan. In the latter all species of goods are carried on the shoulders of the people, chiefly the females; in Thibet, they are conveyed by the chowry cattle, horses, mules and asses. The horses, which are very docile, are not natives of Thibet, but mostly brought from Turkestan, after having been carefully emasculated, to prevent their propagating their species. China has been justly celebrated for her magnificent bridges and public works, but Thibet is far from sharing in this celebrity. Over one river, crossed by Mr. Turner (Embassy to Thibet, p. 229), was constructed a long bridge, upon 9 piers, of very rude structure. 'The piers were composed of rough stones, without cement; but to hold them together, large trees, with their roots and branches, had been inserted; and some of them were vegetating. Slight beams of timber were laid from pier to pier; and upon them large flat stones were loosely placed, that tilted and rattled when trod upon; and this, I fear, is a specimen of their best bridges. Many were extremely dangerous to pass over.' The boats, also, used to cross the rivers are of a very rude kind; some are made chiefly of leather, consisting of a rude skeleton of wood, with thwarts and ribs, over which a bull's hide is stretched.

The country is politically divided into Wei and Tsang, or Hither and Farther Thibet. Wei is that division bordering on China, having for its cap. Lassa, or H'assa, the residence of the Dalai Lama. It is divided into 8 cantons, that of Lassa being the principal; and 39 feudal townships, called *tooszes*, which lie northward, contiguous to some similar townships in the country of Ko-ko-nor. Tsang, or Ulterior Thibet, is W. of the former, and extends W. from about long. 90° E. It is divided into 7 cantons, its cap. being Tesboo-Loomboo. These 2 provs. are under the direction of two ministers, sent from the imperial cabinet at Pekin; and of two high priests of Thibet, called Dalai Lama and Bantchin-erdeni. The ministerial residents govern both provs. conjointly, consulting only with the Dalai Lama for the affairs of Hither, and with the Bantchin-erdeni for those of Farther Thibet. All appointments to offices of government and titles of nobility must be approved by the Chinese officers. But in minor matters the residents do not interfere, leaving such affairs to the secular deputies of the high priests, called D'heba. The government of the 39 feudal townships in Hither Thibet and of the Tamuk or Dar-

Mongols inhabiting the N. frontier, is entirely in the hands of the residents. Two officers, natives of the country, are sent to each *canton* from Lassa, and relieved every three years. The subordinate management of the communities is intrusted to two officers in each, the *d'heba* and *vazir*, the former appointed from Lassa, the latter a native of the place, who, with the chief lama of the village, form a sort of local council, dependent on the provincial authorities; who again are obliged to refer to the capital for instructions in all extraordinary cases.

Thibet is remarkable as being the central seat and headquarters of Buddhism, where the Buddhist religion is preserved in its greatest purity. The whole nation is divided into two distinct and separate classes, those who carry on the business of the world, and those who hold intercourse with heaven. No interference of the laity ever interrupts the regulated duties of the clergy, nor do the latter ever employ themselves in secular affairs. In this, and in the absence of castes, consist some of the most striking differences between the religion of Thibet and that of Hindostan, all distinction of caste being utterly repudiated by the Buddhist faith. The priests of Thibet are all called *lamas*, and the Grand, or Dalai, Lama, who resides at Lassa, is believed by his adherents to be an incarnation of the Divinity in a human form. On the dissolution of his body, he is supposed to reappear in the body of some infant, who subsequently passes through the term of his mortal existence with all the honours of the Grand Lama. The Teeshoo Lama and others are also supposed to be divine incarnations, occupying successively different bodies. The Buddhists of Thibet have convents for men and women, and their religious institutions present several striking coincidences with those of the R. Catholic church.

The written laws of Thibet, which are said to be of high antiquity, have in recent times been modified in accordance with those of China. Robbery or dacoity is usually punished by perpetual banishment, murder by death. Adultery is not classed among serious criminal offences, and strict chastity before marriage is not expected in the fair sex. In Thibet, as in Bootan and other countries of the Himalaya, the practice of *polyandria* is common; a female associating herself with all the brothers of a family, without restriction of age or numbers. The choice of the wife is the privilege of the elder brother.

The people of Thibet belong to the great Tartar family. Their physical appearance has been already noticed. (See ASIA.) They are said to be mild and humane, but their intellect is sluggish, and they have never exhibited the enterprise of their neighbours either to the N. or S. At Dras, in W. Thibet, Moorcroft (Travels, ii. 43) found the pop. much addicted to pilfering; but he says that this is not the character of the people in general, especially of those who follow the faith of Buddha; the people of Dras are Mohammedans, and, like those of Ladakh generally, have suffered much moral detriment from contact with the Cashmarians. In this part of Thibet the houses are built of pebbles, cemented with earth, having terraced roofs, without chimneys. Further E. the peasants' dwellings are mean structures, resembling brick-kilns in shape and size, and built of rough stones heaped upon each other without cement. The great scarcity of timber in Thibet prevents the higher class of inhabs. from boarding the floors of their rooms, which are accordingly of stone or

way of a bed, a thick mattress, which serves for a seat by day. Both sexes dress chiefly in woollens, in which yellow and red are predominant colours, with upper garments of sheep, goat, or jackal skins, and high and thick boots; but the upper classes partly in silks, and in cloaks lined with sable or other furs. Their food principally consists of barley, variously prepared, with tea, spirits, beer and mutton, which last they prefer raw. Their meals are taken at no stated times, but under the impulse of hunger. The business of the day usually begins by prayer; they then follow their peculiar avocations till evening, which is always spent in recreation, music and dancing being among their principal amusements.

The art of printing has, from a very remote age, been practised in Thibet. But no improvements appear to have been made in any branch of science known to the inhabs. Their mode of printing has probably been derived from China, but they esteem the city of Benares as the traditional source of both their learning and religion. There appears to have been from the remotest time a connection between Thibet and India; and the *uchen* character, in which the sacred writings of this people are preserved, bears a strong resemblance to that of the Sanscrit. The *umin*, or ordinary character of business and correspondence, is distinct from the former.

Several remarkable customs prevail in Thibet. In every visit of ceremony a silk scarf, usually white, and with the mystic sentence *Dom mane pae me oom* interwoven at both ends, is invariably exchanged at every visit of ceremony, and accompanies every letter sent, between people of every rank and station in life. 'This usage,' says Turner, 'is observed in all the territory of the Deb Rajah (Bootan); it obtains throughout Thibet; it extends from Turkestan to the confines of the Great Desert; it is practised in China, and, I doubt not, reaches to the limits of Mantchoo Tartary.' Another custom, which the people share with the Parsees, is that of exposing the bodies of the dead among the laity to be devoured by carnivorous birds. The bodies of sovereign lamas after death are dried by exposure to the air, and preserved enshrined; those of inferior lamas are usually burnt, and their ashes inclosed in little metallic idols. Other corpses are committed to the rivers, but the inhumation of the dead is totally unknown.

Thibet appears to have had relations with the Chinese empire at a very early period; but it was governed by its own princes till about 1720, when the emperor Kang-he acquired its sovereignty. Still the greater share of power was left in the hands of the Grand Lama till the invasion of the Nepaul Gorkhas in 1790, when, on their expulsion by the Chinese, the present form of government was established, and strangers, formerly permitted to enter the country, were excluded.

THIELT, a town of Belgium, prov. W. Flanders, arrond. Bruges, cap. cant., a little S. of the railway between Bruges and Ghent, 13 m. SSE. the former. Pop. 10,910 in 1860. Thielt has no government establishments or public buildings of any consequence; but it is a busy and flourishing town, with manufactures of leather, hats, soap, and lace, being indebted for its prosperity to its situation near a tributary of the Lys, which gives it the advantage of a considerable inland navigation. It unites with Poperingen in sending three mems. to the provincial states. Among the natives of Thielt was Oliver Ledain, the barber, and afterwards the favourite of Louis XI. This

did not escape the fate due to his deserts, having been hanged in 1484, after the death of Louis.

THIERS, a town of France, *dép.* Puy de Dôme, cap. arrond., on the Durole, 23 m. ENE. Clermont. Pop. 15,901 in 1861. The appearance of the town is picturesque, being situated on the declivity of a hill, and tolerably well built; but its streets are narrow and steep, and its vicinity is so arid and bare that its inhabs. have been always obliged to depend mainly on their manufacturing industry. It has considerable fabrics of hardware and cutlery, and of woollens, paper, leather, &c. It is the seat of tribunals of primary jurisdiction and commerce, a chamber of manufactures, a council des prud'hommes, and a communal college. It owes its origin to a castle existing here in the earliest period of the French monarchy, and is supposed to derive its present name from Thierri, king of Metz, early in the 6th century.

THIONVILLE, a fortified town of France, *dép.* Moselle, cap. arrond., on the Moselle, 16 m. N. Metz, on the railway from Metz to Luxembourg. Pop. 7,818 in 1861. The town is, in general, well built, and, unlike most fortified towns, has broad streets. It is entered by three gates, and communicates with its citadel across the river by a wooden bridge. It has a handsome place d'armes, three sides of which are occupied by barracks, and the fourth by the cavalry stables, considered among the best in France. The new par. church, corn market, theatre, college, civil hospital, and the former mansion of the governor, now the sub-prefecture; the tribunal of primary jurisdiction, mayor's residence, and gendarmerie, with the botanic garden, are all deserving of notice. Hosiery, woollen cloths, candles, leather, liqueurs, and spirits, are manufactured in the town and its vicinity.

The kings of France, of the first and second races, frequently resided here. After the Carlovingians, Thionville successively belonged to the counts of Luxembourg, and to Burgundy, Austria, and Spain. It was repeatedly besieged and taken in the 16th and 17th centuries, but has belonged to France ever since it surrendered to the Prince of Condé, in 1643.

THIRSK, a parl. bor., market town, and par. of England, co. York, N. Riding, wapent. Birdforth, on the Codbeck, an affluent of the Swale (here crossed by two stone bridges), by which the town is divided into Old and New Thirsk, 22½ m. NW. York, on the Great Northern railway. Pop. of parl. bor. 5,350 in 1861. The parl. bor. comprises the townships of Thirsk, Sowerby, Carlton-Miniott, and Sand-Hutton, in the par. of Thirsk, with the adjacent townships of S. Kelvington and Bagby, including an area of 9,810 acres. The old town is chiefly composed of one long street of rather an unpromising appearance, at the commencement of which is a small open space. In the new town, also, the houses are, for the most part, of an inferior class, and inhabited by small tradesmen. The par. church is a large and handsome edifice, in the Perpendicular style; it has a lofty W. tower, and is wholly of one design, with pierced battlements; the details are good, and the general appearance elegant. A part of this church is said to have been built out of the ruins of the castle, belonging to the Mowbray family, erected in the 10th and destroyed in the 12th century, on the site of which New Thirsk is partly built. The living of Thirsk, a perpetual curacy worth 143*l.* a year, is in the gift of the archbp. of York. There are several places of worship for Dissenters, charity schools, and a dispensary. The principal employment is the manufacture of coarse linens and sack-

nally, and sworn in at the court leet of the lord of the manor. The former bor. comprised only a part of the old town of Thirsk. It sent two mems. to the H. of C. in the 23rd Edward I., and again from the reign of Edward VI. down to the passing of the Reform Act, the right of election being in the owners of burgage tenements. The Reform Act deprived Thirsk of one of its mems. Reg. electors, 442 in 1865. Markets on Mondays. Fairs, eight times a year for cattle, horses, sheep, and leather.

THOMASTOWN, an inland town of Ireland, prov. Leinster, co. Kilkenny, on the Nore, 18 m. N. Waterford. Pop. 1,426 in 1861, against 2,348 in 1841. The town, which consists mostly of mean houses, is principally occupied by agricultural labourers and small traders, generally in very depressed circumstances. The public buildings include the par. church, a Rom. Cath. chapel, a court house, and a bridewell. Lighters of from 20 to 30 tons come up to the town, which has three large flour-mills, and exports considerable quantities of flour, corn, and provisions: it has also a tannery and two breweries. Thomastown sent two mems. to the Irish H. of C., but was disfranchised at the Union. Quarter sessions are held in January, April, July, and October; and petty sessions every alternate week. It is a constabulary station. Markets on Mondays and Saturdays. Fairs: March 17, May 25, June 29, and Sept. 15.

THORN, a fortified town of the kingdom and prov. of Prussia, reg. Marienwerder, cap. circ. on the Vistula, here crossed by a long wooden bridge, about 90 m. from its mouth, and 52 m. SSW. Marienwerder, on the railway from Dantzic to Warsaw. Pop. 15,505 in 1861, exclusive of garrison of 2,081 men. Thorn consists of an old and a new town, separated by a wall and ditch. There are three Rom. Cath. and two Protestant churches, several convents and asylums, and a Lutheran gymnasium. It is the seat of the courts for the circ., and has various manufactures, and a considerable trade. It is very strong, its fortifications having been greatly improved and augmented since 1815. It was founded by the first grand master of the Teutonic order, in 1231, and most part of its principal edifices are of old date. But its chief claim to notice is derived from its having been the birthplace of Copernicus, the discoverer, or rather restorer, of the true theory of the world, born on the 19th February, 1472. His great work, 'De Revolutionibus Orbium Coelestium,' in six books, was published at Nuremberg, in 1543, a few days before the death of its illustrious author, which took place on the 24th of May of the same year.

THORNBURY, a market town and parish of England, co. Gloucester, hund. Thornbury, in the vale of Berkley, 11 m. N. by E. Bristol. Area of par. 11,580 acres. Pop. of town, 1,497, and of par. 4,494 in 1861. The town consists principally of three streets, arranged in the form of the letter Y. The church is a handsome cruciform structure, with a lofty tower, ornamented with rich open-worked battlements and pinnacles. The living, a vicarage worth 500*l.* a year nett, is in the gift of the dean and chapter of Christchurch, Oxford. There are two subordinate curacies in the par., at Oldbury and Falfield. It has also Baptist, Independent, Quaker, and Wesleyan meeting houses; a grammar school for boys, another free school for thirty-six children, and almshouses. But it is principally remarkable for the remains of a magnificent castle, begun by Stafford, duke of Buckingham, in 1511, but left in an unfinished state when he suffered on the scaffold, in 1522. Its site is very commanding; its style is the late Perpendi-

esting from its affording some fine specimens of the last gradation of castellated architecture. Thornbury was formerly a municipal borough, governed by a mayor and twelve aldermen; but no charter is extant, and the body being found useless, the corporation was abolished by the Municipal Reform Act. The clothing trade was formerly carried on pretty extensively, but it is now nearly extinct. Market-day, Saturday. Fairs: Easter Monday, August 15, Monday before St. Thomas, and December 21, for cattle and pigs.

THORNE, a market town and par. of England, co. York, W. riding, wapent. Strafforth, &c., near the Don, and on the borders of Lincolnshire, in a low, flat, and mostly fertile but marshy country, $23\frac{1}{2}$ m. S. by E. York. Area of par. 10,840 acres. Pop. of town, 2,591, and of par. 3,381 in 1861. The town appears to be prosperous: it is tolerably well built, and the streets are paved. The par. church is a neat building, with a square tower and pinnacles. There are several dissenting chapels and two free schools. At a suburb called Hangman Hill, on the Don, about 1 m. from the town, vessels of considerable burden are built, and a brisk trade in corn and other goods is carried on at Thorne, which is greatly promoted by the Staithforth and Keadby canal. Market-day, Wednesday. Fairs: Monday, Tuesday, and Wednesday after both June 11 and Oct. 11, for cattle, horses, and pedlery.

THRASYMENE (LAKE OF), or Lake of Perugia (an. *Lacus Thrasymentis*), a famous lake of Central Italy, prov. Perugia, 10 m. W. the city of that name. It is of a circular shape, about 30 m. in circ., has several small islands, and is rather shallow, its greatest depth not exceeding 24 ft. It is well stocked with fish, and its banks are covered with olive plantations. Being surrounded by ramifications of the Apennines, it has no natural outlet for its waters; and, in consequence, when it was swollen by rains, it was apt to overflow its banks, and damage the surrounding country. To obviate this danger, a tunnel (or *emissario*), similar to that of Lake Albano (see ALBANO), above $\frac{1}{2}$ m. in length, has been cut through a hill on the SE. side of the lake, by which its surplus waters are conveyed to an affluent of the Tiber. This useful work, if not wholly constructed, was, at all events, repaired and renovated by a lord of Perugia, in the early part of the fifteenth century.

This lake is famous in history for the great victory gained on its banks by Hannibal over the Romans, anno 217 B. C. The battle appears, according to the statements of the best critics, to have been fought in a valley near Passignano, on the NE. shore of the lake, which is entered from the N. by a narrow defile, and is shut up on all sides by steep hills and the lake. Hannibal having entered this defile, posted his troops at the foot and on the slopes of the hills that bounded the valley on either side, and in this position waited the advance of the Romans, by whom he was imprudently followed. The latter entered the valley at night-fall, and at break of day, on beginning their march, they were assailed on all sides with tremendous fury. The disorder caused by this unexpected attack was increased by the circumstance of a thick fog arising from the lake and concealing their enemies. But, notwithstanding they were thus, as it were, caught in a trap, the Romans displayed their accustomed bravery, and struggled, if not for victory, at least to sell their lives as dearly as possible. It is mentioned, as evincing the fury of the contest and its all-absorbing interest, that a violent earthquake, which in great part overturned several towns of Italy, and otherwise committed great ravages, occurred

during the heat of the fight without being noticed by any one! (Livy, lib. xxii. cap. 5.) In the end, however, the triumph of Hannibal was complete. The Romans left 15,000 men, including their consul, Flaminius, whose rashness had led them into the snare, dead on the field of battle; and, according to Polybius, they lost about the same number, taken prisoners. The loss of the Carthaginians did not exceed 1,500 men. (See Livy, *ubi supra*, and the excellent account of Polybius, General History, lib. iii. cap. 8.)

In noticing the lake of Thrasymentene, Byron has alluded to the incident of the earthquake as follows:—

‘And such the storm of battle on this day,
And such the frenzy, whose convulsion blinds
To all save carnage, that, beneath the fray,
An earthquake reel’d unheededly away!
None felt stern Nature rocking at his feet,
And yawning forth a grave for those who lay
Upon their bucklers for a winding-sheet;
Such is the absorbing hate when warring nations meet!’
Childe Harold, iv. 63.

THREE RIVERS, or TROIS RIVIERES, the third town of Lower Canada, cap. distr. of its own name, on the St. Lawrence, where it is joined by the St. Maurice, 66 m. SW. Quebec, and 75 m. NE. Montreal. Pop. 5,280 in 1861. The town derives its name from 2 small islands at the mouth of the St. Maurice, which divide it into 3 channels, but the town is on the W. bank of that river. The situation is agreeable, though not the town itself, which is one of the oldest in Canada. It contains about 500 dwelling-houses, mostly built of wood, a handsome court-house, a strong gaol, a Catholic and a Protestant church, an Ursuline convent, founded in 1677, and various other public buildings. The river is deep near the town, and the steamers stop to take on board passengers and fuel. Here the courts of justice for the district are held; and here, at one period, a great share of the fur trade centred. Some furs are still brought down by the Indians, and purchased by the agents of the Hudson’s Bay Company; and there are a few breweries, and potash factories. But its general trade has been mostly absorbed by Montreal and Quebec.

Trois Rivières was of much more importance formerly than at present, having been originally the cap. of Canada. Its pop. is still principally French, and the names of its streets are all traceable to Paris.

THURGAU, or THURGOVIA, a canton of Switzerland, in the NE. part of the confed., between lat. $47^{\circ} 20'$ and $47^{\circ} 40'$ N., and long. $8^{\circ} 40'$ and $9^{\circ} 30'$ E.; having S. St. Gall, W. Zurich and Schaffhausen, and N. and E. the Rhine and the lake of Constance. Area, 268 sq. m. Pop. 90,347 in 1861. Thurgau, though it cannot be called mountainous, has a very uneven surface, consisting of low hills interspersed with narrow valleys. The canton derives its name from the Thur, which traverses it about its centre; next to which, the principal rivers are the Murg and Sitter. Agriculture is the principal occupation of the inhabs., and though the soil in certain parts requires a great deal of manure, Thurgau may, on the whole, be considered one of the most fertile cantons of the confed. There are extensive vineyards over nearly half the canton, and the value of the produce of wine, in average years, is estimated at 80,000*l.* sterling. The internal consumption may be about a fourth part of the whole quantity, the remaining three-fourths being exported to St. Gall and Appenzell. Considerable quantities of fruit and cyder are exported in the same directions, but the quantity sent to Germany has of late

years diminished. About 100,000 hectols. of wheat are raised annually, being about two-thirds the consumption. Oats, hemp, flax, potatoes, and hops are the other articles chiefly raised; oats and brandy are among the exports to Appenzell. The breeding of cattle is unimportant; but a large proportion of the S. part of the canton consists of fine pasture-land, and lean cattle being imported and fattened, are subsequently exported to the neighbouring states. Nearly one-third part of the inhabs. are more or less engaged in manufacturing labour, principally in weaving cotton and linen fabrics, and spinning flax. The manufacture of linen is, however, declining, and its annual value is not now supposed to exceed 8,000*l.* a year. From 3,000 to 5,000 looms are employed in weaving cotton goods, the chief depôts for which are St. Gall and Zurich. Weavers' wages range from about 7*d.* to 1*s.* 6*d.* a day. There are some rather extensive establishments for cotton printing, the prints being sent chiefly to the Levant. Silks are manufactured for the French markets; and a good deal of the packing canvass, sold in Basle and Zurich, is made in Thurgau.

The constitution, revised in 1831, is democratic. The great council of 100 mems., which has the sole legislative power, consists of the representatives of the 32 circles, into which the canton is divided, elected by all the citizens above 25 years of age who pay taxes on property to the value of 200 florins, and are not paupers, or otherwise disqualified. The great council assembles twice a year, for 15 days at a time, unless its sessions be prolonged on special account: it is wholly renewed every two years, half the mems. going out yearly. The executive duties are intrusted to a council of 6 mems., who must be 30 years of age, and who hold office for 6 years. Two *landammans* are chosen annually, and preside for 6 months alternately in the great and little council. Each commune has its own council, composed of the syndic, or mayor, and 4 other mems., and its police and petty civil tribunal. There are courts of original jurisdiction in each of the 8 districts of the canton, and a supreme court of appeal, in Frauenfeld, the cap. The public revenue of the canton, in 1861, amounted to 899,262 francs, and the expenditure to 879,508 francs.

As early as the 5th century Thurgau was governed by its own counts. It afterwards passed to the dukes of Zähringen, and the counts of Kyburg; and, in 1264, to the house of Hapsburg. In 1460, it was conquered from the latter by the confederated Swiss cantons, and governed by their bailiffs or prefects till 1798. It was then constituted a separate member of the confed., in which it now holds the 17th place.

THURLES, an inland town of Ireland, prov. Munster, co. Tipperary, on the Suir, 77 m. SW. Dublin. Pop. 4,788 in 1861. The river intersects the town, the communication between its different parts being maintained by a bridge. The public buildings comprise a fine Rom. Cath. chapel, which serves for the cathedral of the see of Cashel, a Rom. Cath. college, 2 nunneries, with chapels annexed, a market-house, a court-house and bridewell, and a barrack. The town stands on a wide, scantily-wooded, uninteresting plain. It is tolerably prosperous; for, having no larger town nearer to it than 40 or 50 m., it supplies an extensive interior district, and is besides an important market for country produce. There are 15 annual fairs and 2 weekly markets held at Thurles. There are two nunneries; in one of which are 20 nuns and 60 boarders: there is also a Rom.

tution. General sessions are held twice a year; petty sessions on Saturdays: it is a constabulary station.

THURSO, a sea-port town of Scotland, N. shore, co. Caithness, on the Pentland Frith, at the bottom of Thurso Bay, between Dwarrick Head on the E. and Holburn Head on the W., at the point where Thurso river falls into the bay, 8½ m. SW. Dunnett Head. Pop. 3,426 in 1861. The town is irregularly built, and rather ill paved; but in the suburbs are some neat free-stone houses, and the church, built, in 1832, at an expense of 6,000*l.*, is a handsome structure: it has also a meeting-house for original seceders, an Independent chapel, and several schools. A short way to the E. is Thurso Castle, the seat of Sir George Sinclair, bart., proprietor of the town. Though the most northerly post town of Great Britain, it has a daily communication by a mail coach with Inverness and the south, and it communicates by regular traders and steamers with Leith, Wick, and other ports. There is a harbour at the mouth of the river for the accommodation of vessels drawing 12 ft. water; and ships of any burden may anchor on the W. side of the bay, in Scrabster Roads, under cover of Holburn Head. A little straw plait is manufactured in the town, and it has also a rope-walk and some tanneries. The town has 8 magistrates, appointed by the Sinclair family, the superiors of the bor.

TIBER (an. *Tibris*, Ital. *Tevere*), the most celebrated though not the largest river of Italy, rises in the Apennines, about 5 m. N. Pieve San Stefano, and has a general SSE. course to within 20 m. from Rome, when it turns SW., and enters the Mediterranean by two mouths, 17 m. below that city, after a course of about 150 m. It is said to have been anciently navigable for vessels of considerable burden as far as Rome, and for small boats to within a short distance of its source (Dion. Hal., iii. 44; Strab., v. 218); and it still continues to be navigable, in certain seasons, as far as the confluence of the Nera, 88 m. NNE. Rome; but its navigation is at all times difficult, especially at its *embouchure*, and in the vicinity of Rome, and requires continual attention. The entrance of the river from the sea, and its subsequent navigation, are, in fact, so troublesome, that the harbour of Ostia, at its mouth, was relinquished in antiquity for that of Centum Cellæ, now Civita Vecchia, which still continues to be the port of Rome, though it be considerably more than twice the distance of Ostia from the city, with which it is connected merely by a road. (See the articles CIVITA VECCHIA and OSTIA.) Its principal tributaries are the Topino, Nera, and Teverone from the E., and the Nestore, Chiana, and Nepi from the N. and W. By the Chiana, it communicates with the Arno. Besides Rome, Borgo San Sepolcro, Citta del Castello, Fratte, Orte, Otricoli, Magliano, and Ostia are on its banks, and Perugia and Orvieto in its immediate vicinity. In antiquity the Tiber divided Etruria from Umbria, and the territories of the Latins and Sabines.

Notwithstanding its immortality of renown, the banks of the Tiber are not picturesque, and at first sight generally disappoint strangers. The river is muddy, and during the floods, to which it is very subject, verifies the description of Horace:—

'Vidimus flavum Tiberim, retortis
Litore Etrusco violenter undis;
Ire dejectum monumenta regis.' Od. i. 2.

But at other times it flows with a comparatively

'Et terram Hesperiam venies, ubi Lydius, arva
Inter opima virum, leni fluit agmine Tiberis.'
Æneid, ii. v. 781.

It was anciently called *Albula*, and this name, as well as the epithet *flavus*, given it by Horace and other writers, was no doubt derived from the yellowish hue of its waters, discoloured by the mud with which they are loaded. Some travellers, measuring its mass of waters by its bulk of fame, and finding its appearance inferior to their preconceptions, have represented it as a petty and insignificant streamlet. However, though far inferior in breadth to all the great rivers, yet as it is generally, from a few miles above Rome to the sea, about 300 ft. wide upon an average, it cannot, with justice, be considered a contemptible stream. Though the Tiber at Rome be not so wide as the Clyde at Glasgow, it is deeper, and has certainly a larger volume of water. Above and below the city it runs through groves and gardens, and waters the villas and retreats of the richer Romans, but beyond *Ponte Molle* it rolls through a long tract of plains and hills, fertile and green, but uncultivated and deserted. Yet these very banks, now all silence and solitude, were once, like those of the Thames, covered with life, activity, and rural beauty, lined with villages, and not unfrequently decorated with palaces. '*Pluribus prope solus, quam ceteri in omnibus terris amnes, accolitur aspiciturque villis.*' (Plin. Hist. Nat., lib. iii. 9.) Below the city, when it has passed the *Villa Malliana*, it falls again into a wilderness. It terminates in a marshy pestiferous tract, its two arms inclosing the *Isola Sacra* of the ancients.

TIERRA (vulg. TERRA) DEL FUEGO, '*The Land of Fire*,' so called from its apparent volcanoes by its discoverer Magellan, or Magelhaens, a large island, or rather group of islands, lying off the S. extremity of S. America, from which it is separated by the Strait of Magellan. The group, which extends between the 53rd and 56th degs. of S. lat., and the 64th and 75th of W. long., consists of King Charles' South Land, Navarin, Hoste, Clarence, and some other islands, Cape Horn forming the most S. point. The E. part of King Charles' S. Land is low, with plains like those of Patagonia; but near its W. side it is traversed by mountain chains nearly 4,000 ft. in height, covered with perpetual snow. Slate is abundant, but hornblende is said to be the prevailing rock here and in all the adjacent islands. Lava and other volcanic products have been found. The country, in many parts, seems well wooded, and Winter's bark (*Drymis Winteri*), introduced into medicine in 1579, was discovered here. A kind of birch (*Betula antarctica*) with a stem from 30 to 40 inches in diameter, is one of the principal forest trees, and probably other trees may be found; but the interior has hitherto been very little explored. Gusnacoos and foxes appear to be the most numerous wild animals. The Fuegians are a peculiar race of savages, in nearly the lowest stage of barbarism. Their most striking physical peculiarities are a very small low forehead, prominent brows, small eyes, wide nostrils, large mouth, thick lips, long black hair, and large body, as compared with the extremities. They go nearly naked, but smear over their bodies with various substances; live in wigwams made of the trunks of trees, and subsist almost wholly on fish, seals, and testacea. They are occasionally cannibals, and have, in fact, no objection to any kind of food. They are not wholly ignorant of the arts, being acquainted with the use of fire, and availing themselves of bows and arrows, and in the N. of the *bolas* of the Patagonians. On the whole, however, they would appear to be decidedly below many of the lower

animals in respect of comfort, and to be but little above them in sagacity and invention. Their language is said to present many affinities with the Araucanian.

TIGRIS. See EUPHRATES.

TILBURG, a town of Holland, prov. N. Brabant, cap. cant., in the arrond. of Bois-le-Duc, near the Ley, 13½ m. SW. Bois-le-Duc, on the railway from Venlo to Breda. Pop. 15,583 in 1861. Tilburg is the best built town in the prov., though, from lying out of any great road, it is little visited by travellers. It has three churches, a chapel, and a handsome castle; and has very extensive fabrics of fine and coarse woollen cloths, and cassimeres. It sends 3 deputies to the provincial states.

TILSIT, a town of the Prussian states, prov. Prussia, reg. Gumbinnen, cap. circ. on the Niemen, or Memel, where it is joined by the Tilse, 60 m. NE. Königsberg. Pop. 16,145 in 1861, exclusive of garrison of 775 men. The town consists principally of a long and wide street, with a few good looking houses. The Niemen, which is navigable up to the town, is here crossed by a bridge of boats, 1,150 ft. in length. The exports consist of timber, corn, hemp, flax, provisions, wax, and leather, sent down the river in flat bottomed boats, for shipment at Memel. The cutting of the canal of Oginsky has, by uniting the Niemen with the Dniepr, effected a communication between the Baltic and the Black Sea. It has an old castle, several churches, a royal gymnasium, hospital, and board of taxation, with manufactures of woollen cloth, hosiery, gloves, leather, and hardware.

This town is famous in diplomatic history for the treaty signed here on the 7th of July, 1807, by France, Russia, and Prussia. The conferences that led to this treaty were held between Napoleon and Alexander, who met, for the first time, with great pomp and ceremony, in a raft moored in the middle of the Niemen, on the 25th of June.

TIMOR (THE EAST), an island of the E. Archipelago, 2nd division (Crawford), principally belonging to the Dutch, between the 123rd and 128th degrees of S. lat., and the 13th and 15th degrees of E. long., 100 m. SE. Floris, and 260 m. from the NW. coast of Australia. It extends obliquely from NE. to SW., its length being estimated at 250 m., and its average breadth at 35 m. Area estim. at 8,800 sq. m., and pop. at 800,000. The natives of the interior are Papuan negroes; the coasts are inhabited mostly by Malays, Chinese, Dutch, and Portuguese, the latter possessing the town of Dilli, on the NE. side of the island. Surface mountainous, but without volcanoes. Its rivers are small; and the soil is, upon the whole, not particularly fertile. Sandal-wood and wax are the most valuable products: about 10,000 cwt. a year of the first were formerly exported to Java. The natives cultivate rice, maize, millet, yams, sweet potatoes, and cotton; rice and maize, with the sugar of the lontar palm, and sago, are their principal articles of food. Gold is found both in grains and large pieces; but the aborigines are said to have a strong aversion to search for it, and once massacred a party of Dutch, sent inland to collect the metal. The imports are rice, arrack, sugar, tea, coffee, betel nut, and Chinese, Indian, and European manufactures; the duties on the trade have been said to suffice for the keeping up of the Dutch establishments on the island. The Dutch fixed themselves at Coepang, on the SW. coast, in 1630; but we learn, from recent accounts, that they have now all but abandoned Timor for Sandihera.

Island, about 200 m. more to the W., which abounds with fertile and grassy plains, and where the colonists are much less likely to be disturbed by the hostility of the natives.

About 300 m. NE. Timor is Timor Lant, an island 70 m. in length, by about 25 m. average breadth.

TIMBUCTOO, or **TOMBUCTOO**, a town of Central Africa, on the S. border of the great desert of Sahara, about 8 m. N. from the Ioliba, or Niger, but near one of its arms or tributaries, in about lat. $17^{\circ} 50' N.$, long. $3^{\circ} 40' W.$ Stationary pop. probably 10,000 or 12,000, but, according to the calculations of one of the visitors, Dr. Barth, at times above 20,000. The existence of this city has been long ascertained; but as till recently it was only known to Europeans by vague reports and suspicious narratives, the most conflicting and contradictory reports have been made respecting it. Certainly, however, the *ignotum pro magnifico* has seldom been more strikingly exemplified than in this instance, the most exaggerated and unfounded statements having been put forth respecting its magnitude, commerce, and pop. These statements have now been completely dispelled, and Timbuctoo is ascertained to be a very poor town in a wretched country. It is situated amid burning and moving sands on the verge of a morass. It is of a triangular form, about 3 m. in circuit, and is surrounded by walls. The better sort of houses, built of bricks dried in the sun, are large, but not high, consisting entirely of a ground-floor. Each house forms a square, containing two inner courts, round which are ranged the chambers, without windows or chimneys, and serving at once for magazines and bed-rooms. But within and without the town are many straw huts of a circular form, serving as lodgings for the poor and for slaves, who sell merchandise for their masters. The streets are clean, and sufficiently wide to allow three horsemen to pass abreast. The town has seven mosques, two of the largest of which have walls about 15 ft. in height, and are each surmounted by a tower. It is chiefly inhabited by negroes of the Kissour nation; but it is also the residence of a considerable number of Moors, who carry on the trade of the town, and who leave it as soon as they have accumulated a little property. The inhabitants are zealous Mohammedans.

The trade of Timbuctoo is considerable, it being a station for the caravans between N. Africa and the Soudan, or Nigritia, and also a depôt for their produce. Salt is, however, the staple merchandise of the place. This important article, which is wholly wanting in Soudan, is brought from the mines of Towdeyni, in the desert, about 335 m. N. from the town, being conveyed thither in the form of cakes on the backs of camels. In addition to salt, the caravans from the Barbary States bring dates, stuffs of European manufacture, with fire-arms, gunpowder, hardware, glass ware, coral, tobacco, paper, and other articles, which they exchange for slaves, gold-dust, ivory, ostrich-feathers, palm-oil, and gums. Owing to the sterility of the surrounding country, all the provisions required for the use of the town have to be brought from Jenné, on the Niger, about 300 m. SSW. Timbuctoo. These are conveyed by an arm of the river to Cabra, whence they are carried by camels, about 3 m., to the town. Jenné, according to Caillié (Travels to Timbuctoo, ii. 48), is a more important, richer, and more commercial town than Timbuctoo. The Tovariks, a warlike and savage tribe, on the banks of the Niger, exact heavy

who receives presents, but imposes no duties either on the inhabs. or the products brought to the town. The government is, in fact, patriarchal, and the slaves, of whom there are great numbers, are well treated.

Timbuctoo is said to have been founded A.D. 1213, and to have soon after become the capital of a great Moorish monarchy (Walcknaer, Recherches Géographiques, p. 14); and since it ceased to enjoy this distinction, its trade, as well as its importance, is believed to have greatly declined. But it is not at all likely that a town in such a situation should ever have been the cap. of any considerable state; and it seems probable that the accounts of its ancient have but little better foundation than those of its modern prosperity. Ritter, who has collected and discussed the different accounts of Timbuctoo published previously to that of Caillié, has exaggerated alike its importance and its trade, and has farther indulged in some rather fanciful speculations as to the increase of the latter. (Geography of Africa, Fr. trans. ii. 81-112.) It would indeed be easy to show that the barbarism of Africa depends on natural and permanent, and not on artificial or accidental circumstances; and though its commerce and civilisation may no doubt be materially increased in the course of time, the fair presumption seems to be that, owing to the nature of the country and climate, the wants of the natives and their industry will always be much too limited to admit of their ever becoming extensive consumers of European products.

TINIAN, one of the Ladrone Islands, which see.

TINNEVELLY, a district of British India, presid. Madras, at the E. extremity of Hindostan, between lat. 8° and $10^{\circ} N.$, and principally between long. 77° and $78^{\circ} E.$, having N. the district of Madura; E. and SE. the Gulf of Manar, separating it from Ceylon; and SW. and W. Travancore, from which it is divided by a chain of mountains. Area, 5,590 sq. m. Pop. estim. at nearly 900,000. The face of the country is a little undulated, but the general appearance is that of an extensive plain interspersed with small hills. The lower parts are well supplied with tanks, and afford great quantities of rice. On the banks of the rivers are also numerous paddy fields. There are several flats that run to a great distance, on which abundance of cotton is produced; the higher grounds are well cultivated, and covered in the season with luxuriant crops of dry grain. S. of Palmacottah, towards the extremity of the peninsula, the country becomes sandy and bare, covered in general with Palmyra topes. Towards the E. coast, and all round to the S., there are several hills of red sand, with which the atmosphere is often darkened during the windy season. Close to the sea beach, all along from Tutacurin to Cape Comorin, the small villages are inhabited by fishermen, who are all Christians, and several Roman Catholic churches are situated close to the sea.

Tinnevelly is intersected by many winding rivers, which are supplied with water by both monsoons. The climate of some parts is remarkable. In the N. it is similar to that of Madura, but in the mountains on its W. side are several openings or passes, which, while the rest of the country on the E. side of India is parched up with heat, admit the cool winds prevailing at that period on the Malabar coast. The chief of these is the Arungole pass, near which is Kotallum, a place of great resort for Europeans, on account of its bracing climate.

Rice and cotton are the chief products of this

common Carnatic products are neglected, and in unfavourable seasons rice is imported from Travancore. While Ceylon belonged to the Dutch, an attempt was made to establish spice plantations in Tinnevely, and cinnamon and nutmegs were planted, but subsequently these attempts were abandoned. Tinnevely is subdivided into 11 *talooks* or circles. Its chief towns are, Tinnevely, the cap. and residence of the collector and judge, in about lat. $8^{\circ} 48' N.$, long. $78^{\circ} 1' E.$; and Palacottah, the head military station, about 5 m. to the E., where a good many long cloths, silks, and muslins are made for exportation to Madras and elsewhere. Iron is forged and saltpetre obtained in many parts of the district. The inhabs. of Tinnevely appear to live in greater comfort than those of the neighbouring districts, and their dwellings are mostly well constructed. Mohammedans are few, and the primitive Hindoo manners and customs are scarcely anywhere seen in greater purity.

TIPERAH, a district of British India, presid. Bengal, between lat. 23° and $24^{\circ} 30' N.$, and the 91st and 93rd degs. of E. long., having N. Sylhet, E. the Munnepoor territories, S. Chittagong and the sea, and W. the Brahmaputra, separating it from the distr. of Dacca. Area, 6,830 sq. m. Pop. estim. at 1,400,000. This district yields cotton, rice, and betel nut of a very superior quality. Elephants of large size are found in the forests, and in the S. salt is manufactured. The coarse cotton goods made here are durable and substantial, and were formerly exported in large quantities. The inhabs. are similar in most respects to those of the adjacent districts beyond the Brahmaputra, though the upper classes have adopted many Hindoo usages. In respect of public education Tiperah appears to be extremely backward. It was acquired by the British in 1765.

TIPPERARY, an inland co. of Ireland, prov. Munster, having N. the Shannon, by which it is separated from Galway; E. King's County, Queen's County, and Kilkenny; S. Waterford; and W. Cork and Limerick. Area, 1,018,173 acres, of which 182,147 are unimproved mountain and bog, and 11,328 water. The mountainous districts are in the SW. Adjoining Waterford and Cork, in the SE. angle, is Sliebhuanan Mountain, and a chain of mountains runs across the co. from Limerick to King's County. The bog is mostly a portion of the great bog of Allen. With these exceptions, Tipperary consists principally of extensive and fertile plains, with a calcareous subsoil, forming as rich land as is to be met with in any part of the empire. Some very large estates, but many of a moderate size. Tillage farms generally small, and mostly held under middle-men. The *con-acre* system is very prevalent in some parts of this co., as it is indeed in some cos. of Ireland, though it is carried to the greatest extent in Connaught. By *con-acre* is meant a pernicious custom prevalent among the landlords and occupiers of the larger class of farms, of letting to the peasantry or cottiers, small slips of land varying from a perch to half an acre, for a single season, to be planted with potatoes, or cropped. Old grass-land is frequently let out on this system, and then it is usual to allow the surface to be pared and burnt. The rent of this land is enormous, running from 7*l.* to 12*l.* or 13*l.* an acre. Potatoes are invariably planted on *con-acre* land when it is broken up from grass; and afterwards it is usual to take from it successive crops of corn. Wherever this practice exists, there cannot, of course, be the least improvement; and nothing but the extraordinary fertility of the soil could enable it

But, despite the prevalence of *con-acre*, some considerable improvements have been effected of late years, in the introduction of improved implements and improved stock, the extension of green crops. Grazing, however, was formerly, and still is, the principal employment in Tipperary. The native Irish breed of long-horned cattle attain to a very large size, and are found in the greatest perfection in this co. Many thousands are annually exported. There are also many fine flocks of long-woolled sheep. Average rent of land, 17*s.* 8*d.* an acre. Unfortunately, the condition of the peasantry, instead of being improved with the improvements that are admitted to have taken place in agriculture, is, on the contrary, more depressed now than at any former period, and, in consequence, they are extremely turbulent, and agrarian outrages are probably more frequent in this than in any other Irish co. The manufacture of broadcloth was formerly carried on to some extent at Carrick, but is now wholly relinquished. Tipperary has copper and lead mines, coal, slate, &c. Exclusive of the Shannon, the principal river is the Suir. It contains ten baronies and 186 pars., and returns four mems. to the H. of C.; two being for the co. and one each for the bors. of Clommel and Cashel. Registered electors for the co. 8,996 in 1865. At the census of 1861, the co. had 247,496 inhabs., being 108,466 in the north riding, and 139,030 in the south riding. In 1841, the pop. of the co. was 435,553, showing a decrease of 188,057 in twenty years.

TIPPERARY, an inland town of Ireland, prov. Munster, cap. of the above co., near the Arra, an affluent of the Suir, 28 m. SE. Limerick, on the railway from Dublin to Cork. Pop. 5,906 in 1861. The town is agreeably situated in a fine undulating country, and within a few miles of a beautiful range of hills, which divides the cos. of Tipperary and Limerick. There is no town westward nearer than Limerick, and there is, consequently, a busy retail trade, the result of country wants. Tipperary has a par. church, a Rom. Cath. chapel, a Methodist meeting house, schools on the foundation of E. Smith, a market house, a barrack, and a bridewell. Petty sessions are held on Thursdays. A chief police magistrate resides here. Markets on Thursdays and Saturdays. Fairs: April 5, June 24, Oct. 10, and Dec. 10.

TIRHOOT (native *Tirabhukti*), a district of British India, presid. Bengal, prov. Bahar, between lat. 25° and $27^{\circ} N.$, and long. 85° and $87^{\circ} E.$; having N. Nepaul, E. Purneah, W. Sarun, and S. Bhaugulpore and the Ganges, which separate it from the districts of Bahar and Patna. Area, 7,732 sq. m. Pop. estim. at 1,700,000. The surface is undulating and well watered; the climate is more healthy than that of the districts more to the S. In the N. there are extensive tracts of waste land, but Tirhoot generally is well cultivated, principally in consequence of the number of British settlers. Tirhoot is one of the principal districts in India for the growth of indigo; besides which, sugar, opium, tobacco, turmeric, ginger and rice are its chief vegetable products, and great quantities of saltpetre are procured from the soil. It also supplies great numbers of cavalry and other horses. Timber abounds in the N., but is of little utility from the absence of roads and the shallowness of the rivers.

Tirhoot appears to have formed an independent Hindoo principality till 1237. It was annexed to the crown of Delhi in 1325, and acquired by the British in 1765.

TIRLEMONT (Flemish *Thienen*), a town of Belgium, prov. S. Brabant, arrond. Louvain, 11

in 1861. Its extensive but now dismantled walls enclose a large extent of ground not built on, with a large square, in which is the ancient town-hall. It has manufactures of woollen cloths, flannels, and hosiery, oil, soap, earthenware, paper, and saddlery, with potteries, breweries, and distilleries. It was formerly much more populous and thriving, having been one of the most important places in Brabant; but being repeatedly taken and retaken by the Spaniards, French, and Dutch, in the seventeenth and eighteenth centuries, it suffered greatly in consequence.

TITCHFIELD, a market town and parish of England, co. Hants, div. Fareham, hund. Titchfield, on the Titchfield river, near the mouth of Southampton Water, $7\frac{1}{2}$ m. ESE. Southampton. Area of par. 15,960 acres. Pop. 4,043 in 1861. The town is small but well built, and is the residence of many families of respectability. A part of the church is said to have been built by William of Wykeham, in the fourteenth century, and other parts are still more ancient. There is an Independent meeting house, and a charity school for twenty-four children.

Near the town are the remains of Titchfield House, in which Charles I. took refuge after his escape from Hampton Court, in 1647, built by the first earl of Southampton, on the site of a former Premonstratensian abbey; but the mansion is now nearly dilapidated, the entrance gateway and the stables being the only extant remains. Titchfield gives the title of marquis to the Bentinck family.

TITICACA (LAKE OF), the largest and most elevated of the S. American continent, is partly comprised in the Bolivian republic, and partly in that of Peru; being enclosed by the Cordilleras S. of the table land of Cuzco, and extending chiefly between lat. 15° and 17° S., and long. 69° and 71° W., about 135 m. SE. Cuzco. Its outline is very irregular, being divided by a number of headlands into a main body, of an oblong form, and three subsidiary portions. Its area has been estimated at 4,000 sq. m., and its height above the ocean at 12,847 ft. It is said to be in many places nearly 500 ft. in depth. It contains many small mountainous islands, and from the largest, at its SE. extremity, the lake has received its name, which signifies 'the Leaden Mountain.' This island is 3 leagues in length by 1 in width, and about 1 m. from the shore. It is mostly uncultivated, but very fertile; and on it tradition places the first appearance of Manco Capac. (Geog. Journ., v. 82.) The island was consequently held in great veneration: a temple was erected on it by the succeeding incas, in which a great deal of wealth is said to have been accumulated; and this, it is alleged, was thrown into the lake by the Indians, on the Spaniards becoming masters of the country. Mr. Pentland states that numerous Peruvian ruins are still found on the island.

The lake of Titicaca receives several rivers, its only visible outlet being the Desaguadero, which flows S., and is soon afterwards lost in the lake of Aullagas. Its waters, though not very potable, abound with fish; and sudden squalls and storms render its navigation rather dangerous. 'The low banks of the lake,' says a traveller (Meyen, Reise um die Erde), 'are lined with rushes, which are here of great utility, being employed for almost as many purposes as the bamboo in the E. The huts of the poor are made of rushes, as also mats for the floor, and bed covers. The boats used on the lake are also made of rushes twisted together; the rudder and the mast only being of wood. These boats are frequently made with great taste

from the banks of the lake, which, even in calm weather, is subject to a heavy swell.

TIVERTON, a parl. and man. bor., town, and par. of England, co. Devon, hund. Tiverton, on the Exe, where it is joined by the Loman, 13 m. N. by E. Exeter, and 184 m. WSW. London, by Great Western railway. Pop. of bor. 10,447 in 1861. Area of par., which is identical with the parl. bor., 20,000 acres. The town is situated partly on the tongue of land between, and partly on the opposite banks of, the two rivers, each of which is crossed by a stone bridge. It is nearly 1 m. in length, NE. to SW., by about 5 fur. in its greatest breadth: it consists chiefly of several tolerably broad and well-paved streets, running N. and S. on both sides the Exe, and mostly joining Fore Street, the main thoroughfare, at right angles. The more narrow lanes and streets are S. of Fore Street. Tiverton is watered by small streams from a branch of the Loman, called the Town leet. On an eminence between the rivers are the remains of the castle, a conspicuous object, occupying about an acre of ground. This fortress was erected in the reign of Stephen, and afterwards came into the possession of the Courtenays, earls of Devon: in the civil wars it was garrisoned by the royalists, but after a short siege was taken by Fairfax. The church, on an eminence near the castle, is reckoned the finest ecclesiastical edifice in the co., after Exeter cathedral. It has a tower 116 ft. in height, and is chiefly in the Perpendicular style, though there are some remains of an earlier date, and an enriched Norman doorway. The ceiling is coved, and has tracery and rich pendants; like many works of that time, the design is better than the execution. The church has some rich screen-work. In the nave are some curious monumental inscriptions; and the pulpit, which was probably made about the time of Charles II., is ornamented with the arms of many Devonshire families painted in separate compartments. The altar-piece is a rich painting of Peter delivered from prison. There are 4 other churches and several meeting-houses, a spacious market-house built in 1830, a corn market, town-hall, bridewell, assembly and subscription reading-rooms, and a theatre.

Tiverton has numerous charities. A free grammar-school, in an ancient and venerable stone edifice, founded and endowed by a rich clothier of the town, named Blundell, in 1604, has now an income of nearly 700*l.* a year. It furnishes instruction for 150 boys, and sends 6 students to either of the universities, and 1 to Baliol College, Oxford; and it has 2 exhibitions of 30*l.* a year each, besides other scholarships. Another free school was founded by R. Chilcott in 1611, and there are several minor schools of a similar kind. The almshouses for 9 poor men, founded by Greenway in 1529, have an income of nearly 200*l.*, and the market trust money distributed to the poor by the corporation amounts to 336*l.* a year. The aggregate income of the various charities of Tiverton is estimated by the charity commissioners at 2,600*l.* a year. The manufacture of lace employs from 1,200 to 1,500 people. The town was at one period famous for its baizes, serges, plain cloths, kerseys, and other woollen goods, and even as late as 1612 was regarded as the head manufacturing town in the W. of England; but its manufactures received a severe blow from a most destructive fire, which occurred on the 5th of August, 1612, from which it never fully recovered, and the introduction of Norwich stuffs, in the middle of the last century, completed its decline. At present the woollen manufacture

into 3 wards, and is governed by a mayor, ■ aldermen, and 18 councillors. It has a commission of the peace, and a court of record for civil actions to the amount of 100*l.* is held once a fortnight. A jail with 6 cells was built about 35 years since. The Boundary Act made no change in the limits of the par. and mun. bor., which, as already stated, are co-extensive with the par. Tiverton was incorporated by James I., who also conferred on it the privilege of sending 2 mems. to the H. of C., the right of election, down to the Reform Act, being vested in the corporation, consisting of 26 individuals. Reg. electors, 489 in 1865. Markets, Tuesday and Saturday, and a large cattle market on the 2nd Tuesday in each mo. Fairs, Tuesday after Whitsuntide, and Sept. 29.

TIVOLI (an. *Tibur*), a town of Central Italy, comarca of Rome, on a steep ridge, on the Tevere (an. *Anio*), 18 m. E. by N. Rome. Pop. 6,980 in 1862. In antiquity, Tibur was to Rome what Richmond is to London; but though in a magnificent and highly salubrious situation, the modern town is dirty and disagreeable, with narrow, steep, and ill-paved streets, and inferior houses. It has a cathedral and some other churches.

Tibur, or Tivoli, which is one of the most ancient cities of Italy, derives its entire interest from the classical associations connected with its ancient name, its scenery, and its remains of antiquity. The Tevere, coming here to the edge of the cliffs that separate its valley from the Campagna, is precipitated downwards in a series of cascades, the beauty of which has been admired from the age of Horace down to the present time.

‘Me nec tam patiens Lacedæmon,
Nec tam Larissæ percussit campus opimæ,
Quàm domus Albuncæ resonantis,
Et præceps Anio, et Tiburni lucus, et nuda,
Mobilibus pomaria rivis.’

Hor. lib. i. od. vii. v. 10.

In modern times, the upper or principal fall was, in a great degree, artificial, from the water having been precipitated over an embankment that had been formed to dam up the river. In 1826, however, one of those destructive floods that occasionally occurred in antiquity (Plin. Epist., lib. viii. 17), as well as in our own times, swept away the whole of this embankment, along with a church and some contiguous houses, so that the upper fall was nearly destroyed; at the same time that a branch of the river which ran through the town was dried up. But new channels have been since cut, by which, we believe, the river has been again precipitated down a lofty fall.

In the court-yard of an inn in the town, overhanging one of the cascades, is the classical ruin of a temple, supposed to be either that of the *Sibylla Tiburtina*, or of *Vesta*, constructed in the reign of Augustus. This beautiful structure is ■ rotunda, 22 ft. 11 in. in diameter, surrounded by an open portico of composite columns. Though exposed to the weather, without any roof or covering, it is better preserved than might have been expected. ‘It derives,’ says Eustace (Classical Tour, ii. 232), ‘much intrinsic merit from its size and proportions, but it is not architectural merit alone which gives it its principal interest. Placed on the verge of a rocky bank, it is suspended over the *præceps Anio*, and the *domus resonantis* of the Naiads; Augustus and Mæcenas, Virgil and Horace, have reposed under its columns; it has survived the empire, and even the language of its founders; and, after 1,800 years of storms and tempests, of revolutions and barbarism, it still exhibits its fair-proportioned form to the eye of the traveller and claims at once his applause and

admiration. It may be worth mentioning that an English nobleman, the late Earl of Bristol, obtained permission from the authorities of Tivoli to take down and carry away this classical ruin, with the view of setting it up again in his park in England. Luckily the desecration was prevented by the interference of the Papal government.

Near this temple are the remains of another, now forming a portion of the church of St. George, and an inn in the town is supposed to occupy the site of the temple of Hercules, whence Augustus borrowed the treasure collected by the piety of ages. But, besides these, little remains of the ancient Tibur. But though its temples and its theatres have crumbled into dust, its orchards, its gardens, and its cool recesses, bloom and flourish in unfading beauty. The declivities in its vicinity were anciently interspersed with splendid villas, the favourite residences of the refined and luxurious citizens of Rome. Among these may be enumerated the villas of Sallust, Mæcenas, Tibullus, Varus, Atticus, Cassius, and Brutus. The existing remains of what is supposed to have been the villa of Mæcenas sufficiently attest its ancient magnificence; but probably the modern *Villa d’Este*, erected in the immediate vicinity of the ruins, in the 16th century, by a Cardinal d’Esté, exceeds in extent and grandeur that of the minister and favourite of the master of the Roman world. Horace, who has over and over again expressed his admiration of Tibur, is supposed to have had a villa in its vicinity, and some ruins in a delightful situation are pointed out as those of his residence. But the probabilities are, that the poet was not really master of ■ Tiburtine villa, and that all his allusions to the gratifications he experienced in the groves and streams of Tibur—

—‘circa nemus uvidique
Tiburis ripas, operosa parvus
Carmina fingo.’

Hor., lib. iv. od. ii. v. 30.

may be explained by his frequent visits to the villas of Mæcenas and his other friends.

Such is the mutability of human affairs, that two convents, which raise their white towers above the dark green shade of the olive trees, are now the most striking structures in the neighbourhood of Tivoli; and monks loiter away their existence under the shades where Virgil and Horace elaborated their immortal works.

TOBAGO, one of the W. I. islands belonging to Great Britain; in lat. about 11° 15’ N., and long. 60° 40’ W., 16 m. NE. Trinidad, and 82 m. SE. Grenada. Area, 57,408 acres. Pop. 15,410 in 1861. The island is 32 m. in length and 12 in breadth, on the N. extremity rugged and mountainous, and from the sea appears like a mass of dark abrupt precipices. Towards the S. and W. the ground descends into ■ succession of conical hills and ridges of no great elevation, which, as they approach the sea, terminate in broken plains and low lands. The E. district is also mountainous. The soil in the valleys is generally a rich dark mould, and is well watered by numerous streams and rivulets. Cultivation being for the most part confined to ■ portion of the low lands near the sea on the S. side of the isl., the greater part of the interior is still in a state of nature, the high grounds covered with forests, the deep ravines choked up with vegetation, and the bottoms of the valleys, being very narrow and not possessing free drainage, generally of a wet marshy character. The climate and seasons here are much the same as at Trinidad, only more humid. In some of the low grounds, excluded from the influence of the

breeze, the heat is described as being exceedingly oppressive, particularly at Scarborough, the cap., which lies at the foot of a hill on the S. side of the island. The troops enjoy the advantage of a more moderate temperature, being quartered in Fort King George, on the summit of the hill above Scarborough, where the heat is modified by a constant breeze, and the mean temp. of the year does not exceed 79° Fah. The island is beyond the range of the hurricanes; though Grenada, at so short a distance, is as subject to them as the rest of the Antilles.

Tobago produces almost every kind of plant that grows in the Antilles, besides many common to the adjacent parts of S. America. It was formerly supposed to have given its name to the narcotic plant tobacco, now so widely diffused; but Humboldt has shown that there is no foundation whatever for this opinion, and that tobacco is a word of Mexican origin. (*Nouvelle Espagne*, iii. 50, 2d ed.) Indian and Guinea corn, pease, beans, figs, pine-apples, and all kinds of tropical fruits, are grown, as well as potatoes, yams, carrots, turnips, onions, and manioc. Horses, cows, asses, sheep, and deer, probably introduced by the Dutch, have multiplied greatly, and wild hogs are very abundant.

The total value of the imports and exports, in each of the years 1856-63, was as follows:—

| Years | Imports | Exports |
|-------|---------|---------|
| | £ | £ |
| 1856 | 59,991 | 79,789 |
| 1857 | 60,124 | 76,122 |
| 1858 | 62,136 | 72,400 |
| 1859 | 57,691 | 77,897 |
| 1860 | 51,785 | 67,124 |
| 1861 | 56,442 | 63,170 |
| 1862 | 55,375 | 75,428 |
| 1863 | 46,869 | 48,961 |

The great bulk of the exports consists of sugar, rum, and molasses.

Tobago has its governor, council of 9 mems., and house of assembly of 16 mems., whose powers are similar to those of Jamaica. It is divided into 7 pars. The total public revenue, in 1863, amounted to 8,278*l.*, and the expenditure to 9,251*l.* The sum awarded by government, in 1835, for the manumission of slaves in Tobago amounted to 234,064*l.*

This island, which was discovered by Columbus in 1498, was colonised first by the Dutch, and next by the Courlanders. It was ceded to Great Britain by France in 1763, but was retaken by the French in 1781, who retained possession of the island till 1793, since which it has belonged to England.

TOBOLSK, a government of Asiatic Russia, comprising a large portion of the basin of the great river Obi, or the country between the 50th and 73rd degrees of N. lat., and the 60th and 80th of E. long., having E. the gov. Yeniseisk, S. that of Tomsk and the Kirgbiz territ., W. the govs. of Orenburg, Perm, and Archangel, and N. the sea of Kara and Gulf of Obi. The area may amount to from 900,000 to 1,000,000 sq. m.; and the pop., in 1858, was estimated at 800,000. Except on its S. and W. frontiers, it is almost everywhere level, or but a slightly waiving plain, though varying greatly in point of fertility. From lat. 58° or 60° to lat. 65° or 66°, the country is generally occupied by vast forests of fir and birch; from the woody region N. to the Arctic Ocean, the country, a low plain called the *Tundra*, is the most sterile imaginable, consisting of all but

and there with some stunted shrubs, and occupied by only a few Ostiak tribes, who subsist chiefly by fishing, and the chase of fur-bearing animals. Such is the severity of the climate, that this portion is usually covered with ice and snow for about 9 months of the year; and, during the other months, ice is always found at a little distance below the surface. Immediately to the S. of the woody region, or between latitude 60° on the N. and 54° on the S., is the agricultural portion of the government, including extensive tracts watered by the Irtysh, a part of the Ishim, and the Tobol. Though not generally fertile, this district comprises some very productive tracts, and it has a considerable number of towns, though few of them are of any great size. Even in this part of the government, the climate is very severe; for, though the summer heats are sometimes oppressive, they are but of short duration, and the winters are long and excessively cold. Rye, oats, barley, and buckwheat are the principal crops. Between the agricultural district and the mountains separating the government from the country of the Kirghizes is the very extensive tract called the Steppe of Ishim, from its being in part traversed by that river and its affluents. Except along the river banks, it is mostly sterile; and in extensive tracts the soil is covered with a salt efflorescence.

Iron and copper are extensively raised in various parts of the Oural chain, and gold and silver are produced both there and in the Altai. At Catharinenburg, Kolyvan, and Barnaul are extensive forges, and soap and tallow-works, tanneries, and mat-manufactories are found in different parts; but the commerce of the government is of more importance than its manufacturing industry. Except the clergy, and persons in the government employment, all the inhabs. are more or less engaged in traffic, exchanging their sable and other furs, cattle, cassia, fresh and dried fish, and game, with the Russian traders for corn, flour, and hardware. The merchants of Tobolsk, Toumen, and the principal towns in the S. and W., send every summer boats laden with flour and other provisions, by way of the Irtysh and Obi, to Berezov, and the other small towns in the N., which return with cargoes of fish, and with valuable furs, procured from the Ostiaks and other tribes. These furs are afterwards partly sent, with soap, tallow, and hides, to the fair at Nijni Novgorod; partly to the Kirghiz, to be bartered for horses, cattle, and cotton goods, obtained through Bokhara; and partly to Kiachta, on the Chinese frontier, where they are exchanged for tea, silk fabrics, and other Chinese products. The government, in common with the rest of Siberia, lies under the greatest disadvantages with respect to water communication; the frozen shores of its N. coast are inaccessible for the purposes of trade; and its rivers, though equal in magnitude to any belonging to the Asiatic continent, are covered with ice for the greater portion of the year. The chief mode of travelling and conveying goods throughout a great portion of the government is, as in the N. part of Europe, in sledges drawn by dogs or reindeer.

Travellers agree in representing the Tartar villages in the agricultural part of the government as neat, clean, and comfortable. The houses consist in general of one or two rooms. Near the hearth is an iron kettle, and at one end of the apartment a bench covered with mats or skins: on this all the family sit by day, and sleep by night. The walls are of wood and moss—a layer of moss between every 2 beams. A square hole is cut out

piece of ice is often put in: 2 or 3 pieces will last the whole winter. They use no stoves, and have neither chairs nor stools. The furniture consists of a few earthenware utensils, and a set of tea-table appendages. The women never eat or drink till the men have done, and then seldom in their presence. Owing to the thinness of the pop., and the immense distances between the different towns, education is very little diffused, and besides the schools in the cap. there are hardly a dozen in the rest of the government. Except Tobolsk, the cap., and Toumen, there are no towns worth notice.

TOBOLSK, a city of Asiatic Russia, the cap. of W. Siberia, and of the gov. of its own name, on the Irtysh, close to its junction with the Tobol; lat. $58^{\circ} 11' 42''$ N., long. $68^{\circ} 6' 15''$ E. Pop. 16,240 in 1858. The town proper is built principally on the flat summit of a hill commanding an extensive view, and is surrounded by a strong brick wall with square towers and bastions. When approached from the W. it has a remarkably fine appearance: it contains some good and solid buildings, most of the government offices, and the residences of the Russian and German settlers, being within the walls. Along the banks of the river are suburbs, inclosed by a ditch and palisade, and inhabited mostly by Tartars. The streets, which cross each other at right angles, are mostly paved with wood. Among its public edifices the most remarkable are the cathedral, in the Byzantine style of architecture, with 5 cupolas, the archbishop's and governor's palaces, a monastery, and a large hospital. The climate in winter is very severe, so much so as sometimes to freeze mercury: but the dress and houses of the inhabs. being fitted to resist its influence, it is not so disagreeable as might be supposed. The rivers furnish an inexhaustible supply of fish, and provisions, fur, and game of all kinds are cheap and abundant; and shops, theatres, and places of public amusement are numerous. Being on the great road from Russia to China, it is well supplied with most European and Chinese goods: and French wines, English porter, and books of all kinds are to be met with. Dobell (*Travels in Siberia*) says, 'the society of Tobolsk may fairly stand a comparison with that of some of the best provincial towns in Russia.' Among the inhabs. are many descendants of the Swedish officers, sent thither after the battle of Pultowa, to whom Tobolsk is mainly indebted for its superior civilisation.

The city, which was founded in 1587, is the residence of the governor-general of W. Siberia, comprising the govts. of Tobolsk and Tomsk: it has two ecclesiastical and several Lancastrian schools, and various charitable institutions. No convicts or malefactors are sent thither from European Russia, although persons banished to Siberia for political offences are sometimes permitted to reside in Tobolsk.

TOCAT (an. *Berisa*), a town of Turkey in Asia Minor, pach. Sivas, on the Tosamlu, near its confluence with the Jezil Irmak (an. *Iris*), on the military road from Samsoon to Kharpost, 35 m. SSE. Amasia, and 55 m. NNW. Sivas; lat. $40^{\circ} 7'$ N., long. $36^{\circ} 30'$ E. Tocat would appear to have latterly declined rapidly in pop. and importance. Tournefort, by whom it was visited in the early part of last century, says it was then much larger than Erzeroom; and he estimated its pop. at 20,000 Turkish families, with 4,000 Armenian, and 300 or 400 Greek do., which on the most moderate hypothesis, would make an aggregate of above 120,000 inhabs. The pop. was estimated by Kinneir, in 1810, at only 60,000: and according to

then reduced to a pop. of 6,730 families (between 35,000 and 40,000 individuals), of which 5,000 were Turkish, 1,500 Armenian, 30 Rom. Cath., 50 Jewish, and 150 Greek. The position of the town is striking and singular, being built partly at the bottom, but principally on the declivities of two steep hills, on the side of the narrow valley in which it is situated. The greater number of the houses, which are mostly of wood, have two stories; the streets are well paved, and the springs rising on the hills on which the town is built are so numerous, that each house has its peculiar fountain. Owing to its situation, the climate at certain seasons is oppressively hot; and it is then, also, apt to be unhealthy. With the exception of the mosques, Armenian churches, and khans, it does not appear to have any building of consequence.

The valley, for about 3 m. above the town, is occupied by gardens and vineyards.

TODMORDEN, a market town and chapelry of England, partly in the par. of Rochdale, co. Lancaster, and partly in that of Halifax, co. York, 17 m. NNE. Manchester. Pop. of town, 11,797 in 1861. The inhabs. are principally employed in the manufacture of fustian, dimit, velveteen, and other cotton goods, with woollen fabrics similar to those manufactured at Halifax and Rochdale. The Rochdale canal, which passes by Todmorden, has greatly promoted its prosperity, which has increased rapidly within the last 20 years.

TOKAY, a town of Hungary, co. Zemplin, at the confluence of the Bodrog with the Theiss, 113 m. NE. by E. Pesth, on the railway from Pesth to Kaschau. Pop. 4,138 in 1857. The town has a cathedral, a Lutheran, a Reformed, and a United Greek church, a convent of Piarists, and one of Capuchins, and was formerly defended by a castle demolished in 1705. Tokay derives its celebrity from its being the entrepôt for the sale of the famous sweet wine of the same name, made in the hilly tract called the Hegallya, or submontine district, extending 25 or 30 m. NW. from the town. The Tokay is produced by allowing the grapes to become dead-ripe; the finest quality, or essence, being that which flows from the grapes before they are trodden by the mere pressure of their own weight; the next quality (*ausbruch*), is that which is obtained by treading the grapes, with the addition of a certain quantity of *must*, or juice derived from common grapes; the third and lowest quality (*maslas*) is that which is obtained by the application of a greater degree of pressure to the grapes, and the addition of a still larger quantity of *must*. When new, Tokay wines are of a brownish yellow muddy colour, which, when very old, changes to a greenish tint. The wine made in favourable seasons will keep for almost any length of time, and continues to improve with age. The best qualities are extremely rich and luscious, but cloying; and, unless very old, too sweet for palates accustomed to austerer wines. The finest and oldest varieties of Tokay fetch immense prices. The best qualities are usually bought up for the imperial cellars; small quantities being sent as most acceptable presents to foreign princes and distinguished individuals.

TOLEDO (an. *Toletum*), a celebrated city of Spain, formerly its metropolis, in New Castile, cap. prov. of its own name, on the Tagus, 38 m. SSW. Madrid, on a branch line of the railway from Madrid to Alicante. Pop. 17,275 in 1857. The city stands on a rocky hill, nearly encircled by the river, and encompassed by a wall flanked with about 150 small towers, built by the M.

with narrow, steep, and badly paved streets. But, with the exception of Granada, its situation is the most striking of any town in Spain. Its fine, irregular line of buildings covers the summit and upper part of the hill, behind which, as approached from Madrid, the dark range of the Toledo mountains forms a majestic background. Besides the numerous towers of its convents, churches, and stupendous cathedral—the metropolitan church of Spain—the outline is broken by other buildings of a more grotesque or more massive form; while, here and there, the still greater irregularity of the outline points to ages too remote to have left to modern times any other legacy than their ruins.

Down to the recent changes by which the Spanish ecclesiastics were stripped of the greater portion of their wealth, the revenues of the archbishop and clergy of Toledo were immense; and the pop. of the city consisted principally of priests and friars, and their dependants. The cathedral, founded in 587, is in the same style as those of Seville, Burgos, Milan, Siena, and Bologna. It is internally 384 ft. in length, 191 in breadth, and 107 in height. It has a tower and spire, but the latter is in the style of the Flemish and German spires, a heap of blue turrets piled one upon another. The roof is sustained by 85 columns, which divide the church into five aisles. The columns that run along the aisles are 45 ft. in circ. There are 68 painted windows, and surrounding the choir and the high altar are 156 marble and porphyry pillars. Its interior is elegantly, as well as magnificently adorned. The choir is covered with carvings representing the conquest of Granada, executed by Berruguete, a pupil of Michael Angelo, and Philip de Borgona; and among the paintings are works by Rubens, Titian, Domenico Greco, Vandyke, Guido, E. Caxes, Vincente Carducho, Bassano, and other masters of the first celebrity. The ceiling of the sacristy is painted in fresco, by L. Giordano, and has a picture of the Assumption, by Carlo Maratti. The pope and the king of Spain are always canons of this cathedral; and the revenue of its archbishop once amounted, it is believed, to little less than 100,000*l.* a year. The gold, silver, and jewels, the plunder of Mexico and Peru, preserved in the church, mostly escaped falling into the hands of the French. The archbishop carried away the more valuable articles to Cadiz, those that remained in their places being redeemed for the comparatively trifling amount of 90 arrobas, or 2,250 lbs., of silver.

The alcazar, once the residence of the Moorish, and afterwards of the Castilian sovereigns, is the other principal edifice in the city. It is a noble pile of 3 stories, surmounted by a balustrade, and forming a square of 256 ft. It is built chiefly in the Corinthian and Composite orders, of the dark stone with which the Escorial is built. The N. and S. fronts were erected in the time of Charles V., the former by Covarrabias and Vergara, and the latter by Juan de Herrera. When Toledo ceased to be the metropolis of Spain, the alcazar was converted into a workhouse, and it was subsequently employed for a silk manufactory, established by the archbishop; but it is now untenanted, and utterly neglected. Besides the cathedral, there are numerous churches, monasteries, nunneries, and other religious buildings. Few, however, of these are worth notice. The Franciscan convent is a fine edifice, and has a church built in the time of Ferdinand and Isabella. The late Abp. Lorenzana established a lunatic hospital at Toledo; built the modern edifice for the university, which in 1830 had more than 700 students, principally in jurisprudence; and founded a college for girls, each of whom is dowried, provided they

do not go into a convent afterwards. There are several other colleges, numerous hospitals and asylums, a handsome town-hall, two bridges over the Tagus, one originally a Roman work, bearing a Roman inscription, and terminated on one side by an arch with Corinthian columns; and a mint, supposed to date from the time of the Romans. There are a few pleasant promenades around the city, but the only public lounge in Toledo is the *Plaza Real*. But this square is half monopolised with blacksmiths' shops; and all the others are small, mean, and principally useful as market-places. The houses are mostly floored with brick, and are consequently dusty; and the Roman aqueducts being destroyed, water is sold about the streets, carried in small barrels on asses' backs. There is no public place of diversion of any kind; formerly there was a theatre, but it was suppressed by a royal order obtained through the head of the university. Nowhere are Spanish customs seen more pure than in Toledo, and nowhere is the monotony of the *tertulia* more striking. The solo amusements are talking, or playing *basto* for a very low stake; and after a glass of *agua fresca*, the party separates. In Toledo, a certain circle agrees to form a *tertulia*; one house is selected where it is to be held, and the same individuals assemble at the same house, and at the same hour, every day throughout the year. No admixture of foreign, or even of modern, innovation is to be seen in Toledo. Men of all ranks wear the cloak; and the small round high-crowned Spanish hat is worn, not only by the peasantry, but universally by persons of all classes. Among the women no colours are to be seen; black is the universal dress, and scarcely any one enters a church unveiled.

Toledo has, from a remote period, been famous for its manufacture of sword blades. The royal sword manufactory, which is of great extent, and about 2 m. from the city, is close to the river, which turns its machinery. It once employed many hundred hands, but the number has greatly decreased in recent times. In 1860, about 50 men were employed, who finished about 8,000 swords a year. They work by the piece, and make usually about 100 reals (20*s.*) per week; some of the most industrious 24 reals more. The art of tempering the steel had, for some time, declined, but it has since revived. 'The flexibility and temper of the blades,' says a traveller, 'are surprising: there are two trials which each blade must undergo before it is pronounced sound; the trial of flexibility, and the trial of temper. In the former, it is thrust against a plate on the wall and bent into an arc, at least three parts of a circle. In the second, it is struck edgeways upon a leaden table, with the whole force which can be given by a powerful man, holding it with both hands. The blades are polished upon a wheel of walnut wood.' In addition to its sword manufactory, Toledo fabricates church ornaments, a few woollens for hospital use, with paper, guitar strings, and coarse glass, and has some dyeing and fulling works.

The origin of Toledo is lost in obscurity. After having belonged to the Carthaginians it became a Roman colony. Few traces of Roman edifices, however, exist, except part of an amphitheatre, and some scattered remains of the Roman walls. In 467 it was taken by the Goths, and became the cap. of their kingdom in Spain, till taken by the Moors in 714. Alphonso VI. and Rodrigo Diaz expelled the latter from Toledo in 1085; and, notwithstanding three vigorous sieges in the succeeding century, it has remained in the hands of the Spaniards ever since. Its decay dates from

the removal of the court to Madrid, under Philip II. The celebrated Cardinal de Ximenes, regent of Spain during the minority of Charles V., was, for a lengthened period, archbishop of Toledo.

TOLOSA (an. *Iturisa*), a town of Spain, in Biscay, prov. Guipuscoa, of which it is the cap., on the Oria and Arajes, 13 m. S. by W. St. Sebastian. Pop. 7,639 in 1857. The town is placed in a narrow defile, surrounded by a pentagonal wall, flanked with towers, and entered by several gates. It is handsome, and well built; the streets, which are furnished with footways, are clean, and lighted at night; and it is tolerably well supplied with water. Here are 2 parish churches, both fine buildings, 2 convents, a hospital, prison, post-house, a stone bridge across either river, with manufactures of arms, copper and earthen wares, woollen cloths, paper, hats, and leather, three-fourths of its inhabitants being artisans. Tolosa is one of the 18 indep. towns in which the provincial assembly of Guipuscoa is held, one of the 4 alternately the seat of the high judicial court of the prov., and the place in which the provincial archives and military stores are kept.

TOMSK, a town of Asiatic Russia, cap. of the gov. of same name, on the Tom, a tributary of the Obi, 650 m. E. by S. Tobolsk. Lat. $56^{\circ} 29' 6''$ N., long. $85^{\circ} 9' 51''$ E. Pop. 9,420 in 1858. The town has several workhouses for exiles; coarse cloth, leather, and soap manufactories; barracks, public magazines, military and other hospitals; an orphan house, and a dispensary. There are a number of handsome houses, but the town is irregularly built, except the part that occupies a hill overlooking the river Tom and the country round. Its principal buildings are the cathedral and another church, the tribunals, treasury (in which are the magazines of furs collected as tribute), and two convents. The inhabs. carry on a brisk trade with the Calmucks and Ostiaks, in cattle and furs; and the town is an emporium for distilled spirits and Chinese goods. It was founded in 1604.

The government of which Tomsk is the cap. is, with that of Tobolsk, under the authority of the governor-general of W. Siberia. Since 1838, it has comprised a portion of the former government of Omsk, and is supposed to have from 1,000,000 to 1,100,000 inhabs. About 1,400 poods of gold are annually obtained from the different gold washings in this government. In its general features it is very similar to the more southerly parts of the governments of Tobolsk and Yeniseisk.

TONNEINS, a town of France, dép. Lot-et-Garonne, cap. cant., on the Garonne, 20 m. NW. Agen, on the railway from Agen to Bordeaux. Pop. 7,947 in 1861. Tonneins is one of the best situated and most active towns in the dép., having a considerable trade in cordage, hemp, and dried fruits, and a royal tobacco factory. It is clean and well built, and communicates with the opposite bank of the river by a new suspension bridge. The esplanade, a good square, on the site of an old castle destroyed in the religious wars; the town-hall, a neat theatre, and some public baths, are worthy notice.

TOPLITZ (or *Toeplitz*), a town and watering-place of Bohemia, circ. Leitmeritz, and, next to Carlsbad, the most popular place of resort of its kind in Germany. It is pleasantly situated on the Saubach, a small stream in a valley between the Erzgebirge and Mittlegebirge mountains, 47 m. NW. Prague, on a short branch line of the railway from Prague to Dresden. Its resident pop. amounts to little more than 2,700; but in the height of the season, in July and August, it is sometimes visited by 15,000 strangers. More

than one-fourth part of its houses are inns, and nearly all the rest are lodging-houses. The town is neat, and has been improved of late years by the addition of foot-pavements in the streets, and it is well lighted at night; but it has no buildings worthy of notice, except such as are connected with the baths. The principal baths are distributed in four distinct buildings; the Steinbad, Fürstenbader, Fürstliche-Frauenzimmerbad, and the Herrnhaus, or mansion of Prince Clary, the proprietor of the town. All these are in the *Baade platz*, or bath square. The Steinbad includes three baths, for the gratuitous use of the public; one for the men, a second for the wives and daughters of citizens, and the third for the female peasantry: the first and last are underground, and vaulted over, and may be compared to large inundated cellars. In the same house are some very comfortable private baths, supplied directly from the source. The Fürstenbad and Frauenzimmerbad comprise a number of superior private baths; the first for gentlemen, and the second for ladies. In the Herrnhaus, the usual residence of the King of Prussia, when at Toplitz, there are many bathing apartments fitted up with great elegance; and attached to this mansion are some extensive and beautiful gardens, always open to the public, and a theatre. The baths in the Girdlerhaus also in the Baade-platz, the Jews' baths and others are supplied from the main springs. Without the town, and in the neighbouring hamlet of Schönau, are many baths of a lower temperature than in the town. In all there are about 90 private baths, which are in such constant requisition when Toplitz is full, that, by a strict regulation, no person is allowed the use of a bath and dressing-room for more than an hour at a time, for which from 10 to 20 kreutzers are usually paid. The springs are saline, with a dash of iron; the hottest, or *hauptquelle*, has a temperature of about 122 Fahr. It emerges from a porphyry rock, and so abundantly that its supply, per hour, has been estimated at 1,189,670 cubic feet of water. The waters of Toplitz are particularly esteemed in gout, and rheumatic affections, and diseases of the joints, requiring tonic treatment. The invalids of the Prussian, Russian, and Austrian armies are often sent here, and lodged in appropriate buildings. Of late years a pump-room has been established in the gardens of Prince Clary.

The hotels and lodging-houses are good and cheap. Dr. Granville, 'Spas of Germany,' says, 'The living at Toplitz is, beyond comparison, cheaper than in any other watering-place I have visited. A dinner at a table d'hôte without wine will cost about 1s. 3d. Apartments may be hired at one of the best hotels, consisting of a bed-room and sitting-room, for not quite a guinea a week.' Bathing is the chief occupation of the morning. The dinner hour is one or two o'clock; the afternoon is commonly spent in excursions; the evening in the theatre or the salons; but, 'except on ball nights, and on the occasion of some great concert, the town is buried in dead silence by ten o'clock.' Public gaming is not allowed; but it is alleged that gambling is, notwithstanding, extensively carried on. Toplitz was the seat of a diplomatic congress in 1813, and again in 1835.

TOPSHAM, a market town and par. of England, co. Devon, hund. Wonford, on the Exe, where it is joined by the Clyst, 4 m. SE. Exeter, of which it may be considered the port. Area of par. 1,740 acres. Pop. of par. 3,503 in 1861. The town consists of several good streets; the Strand, in particular, at its S. extremity, has many respectable residences. The church is a fine building.

eminence overlooking the river. The living, a perpet. curacy, worth 227*l.* a year, is in the gift of the dean and chapter of Exeter. The chief business of the town is ship-building, and most of the inhabs. are connected with shipping. The quay, which was originally constructed in the 14th century, is spacious and convenient; but from the corporation of Exeter (to which it belongs) neglecting to clean the channel of the river, vessels drawing more than 11 or 9½ ft. are unable to come up to it. An active coasting trade is, however, carried on from Topsham. Markets on Saturdays: fair, first Wednesday in August.

TORBAY, a spacious bay of the English Channel, on the SE. coast of Devonshire. It is of a semicircular shape, opening to the E., and nearly 4 m. across from Torquay or Rob's Nose its N. to Berry Point its S. boundary. Its shores at its mouth are on both sides formed by ramparts of rock, but between these, in the centre, at the bottom of the bay, the ground forms a vale, gently declining to the water's edge. Ships anchor all over the bay in 6, 7, 8, and 9 fathoms water. The ground is strong clay, and holds remarkably well. This spacious basin has frequently afforded shelter to the fleets of England, and is celebrated in history as the place where William III. landed on the 5th of November, 1688.

TORGAN, a town of Prussia, reg. Merseburg, cap. circ. Torgan; on the Elbe, 66 m. SSW. Berlin. Pop. 7,985 in 1861. The town is strongly fortified, is the seat of the principal courts for its circle; and has manufactures of woollen cloths and hosiery, with some trade in corn and timber.

The vicinity of Torgan has been the scene of several conflicts. Of these, the most important took place on the 23d of November, 1760, when the Prussians, under Frederick the Great, forced, after a desperate resistance, the intrenched camp of the Austrian army, under Marshal Daun, and gained a decisive victory.

TORNEA, a town of the Russian dom., NW. frontier of the grand duchy of Finland, on a peninsula in the river Tornea, where it falls into the Gulf of Bothnia, lat. 65° 50' 50" N., long. 24° 12' 15" E. Pop. 950 in 1858. The town, which was built by the Swedes, in 1602, consists of two principal streets of wooden houses. It has a considerable trade in the exportation of stock-fish, rein-deer, skins, furs, iron, planks, tar, butter, and pickled salmon. The climate is very severe, though less so, perhaps, than might be expected from its high latitude. In June the sun is visible at midnight above the horizon.

Tornea is celebrated in the history of science for the visit made to it in 1736, by the French academicians Maupertuis, Clairaut, Monnier, and Camus, accompanied by the Swedish astronomer Celsius, with a view to the determination of the exact figure of the earth. The operations do not, however, appear to have been conducted with sufficient accuracy; and there is a discrepancy of about 200 toises between the length of the degree as determined by the academicians and that measured by the Swedish astronomer Svanberg, in 1801. This town, along with the grand duchy of Finland, was ceded to Russia by Sweden, by the treaty of Frederickshausen, in 1809.

TORO, a town of Spain, in Leon, prov. Zamora, cap. intend.; on a hill, at the foot of which runs the Douro, 32 m. NNE. Salamanca. Pop. 8,684 in 1857. The town is enclosed by old and dilapidated walls, and entered by six gates. The streets, though broad, and on a declivity, are dirty, and the houses indifferent. It has a col-

13 convents, with 3 hospitals, a ruined alcazar, or Moorish castle, and a palace belonging to the dukes of Berwick, barracks, and a prison. The inhabs. are principally occupied in the growing and trading in wine, but they have also manufactures of coarse woollen and linen cloths, brandy, and leather.

Toro is of great antiquity. It is famous in history for the victory obtained in its vicinity in 1476, by Don Ferdinand of Aragon, over Alphonso V. of Portugal, and for the collection of laws framed in 1505, and inserted in the Spanish statutes under the name of *Leyes de Toro*.

TORONTO, formerly York, a town of Upper Canada, of which it is the cap., on the N. shore of Lake Ontario, towards its W. extremity, in lat. 43° 32' N., long. 79° 20' W. Pop. 48,340 in 1861. Toronto was founded by Governor Simcoe in 1794, and was burnt by the Americans in 1813. In 1831 it had only about 4,000 inhabs., its subsequent progress having been more rapid than that of any other town in Canada. It is now a handsome town, with spacious streets crossing each other at right angles, many of its buildings being of brick, to which timber is gradually giving place. The public edifices are well adapted to their purposes. Among the most imposing of the latter are the new courts of law, the offices for the legislature, the R. Cath. cathedral, St. George's Church, the lunatic asylum, and the college. The garrison is stationed about 1 m. W. of the town, where the entrance to the harbour is guarded by a battery and two block-houses. Toronto harbour, or bay, is formed by a long and narrow peninsula, stretching out to the SW. for about 6 m., and terminating in Gibraltar Point, on which a lighthouse has been erected. The bay is nearly circular, and about 1½ m. across; it has a considerable depth of water, and affords extensive and safe anchoring ground.

Kingston, at the other extremity of Lake Ontario, on its N. shore, about 140 m. ENE. Toronto, was the former cap. of Upper Canada, and though less central has been considered by many as more eligible than Toronto for this distinction. It has an excellent harbour, where ships of the line may lie close to the shore; and is also the site of the principal naval dockyard in the colony. It covers a considerable extent of ground, and many of its houses are of stone. It has the finest public building in Canada. It is of stone, and cost 90,000 doll.; it includes a town hall, offices for the corporation, and the post office. Kingston is the principal entrepôt of the trade between the Upper and Lower prov.

TOROPETZ, a town of European Russia, gov. Pskof, on the Toropa, 245 m. S. Petersburg. Pop. 8,190 in 1858. The town is entirely surrounded by lakes and rivulets, and communicates by the Toropa with Riga, which renders it a place of some trade. It has 13 churches, including a cathedral, and 2 convents. A few of its houses are of brick or stone, but the major part are of wood, the streets also being paved with planks. On an island in the Toropa is a dilapidated fort.

This town, under the name of Krivitch, is mentioned as early as the introduction of Christianity by Vladimir, about 990. It was the cap. of a republic, which lasted through the whole of the 12th century, but which in the 13th became subject to hereditary princes. Towards the end of the 15th century it belonged to the Poles, but it was retaken by the Russians in 1500.

TORRINGTON, a mun. bor., town, and par. of England, co. Devon, hund. Fremington, partly on the summit, and partly on the declivity of an

SSE. Bideford, and 30 m. NW. Exeter. Area of par. 3,640 acres. Pop. of bor. 3,298 in 1861. The town consists principally of two parallel lines of thoroughfares, nearly 1 m. in length, connected by several short streets. The par. church, which had been mostly blown up by an explosion of gunpowder in the civil wars, was rebuilt in 1651; and, in 1830, a new tower and octagonal spire were erected. The living, a perpet. curacy, worth 162*l.* a year, is in the gift of Christchurch Coll., Oxford. It has a market-place surrounded by good houses, a neat town-hall, places of worship for Baptists, Independents, Wesleyans; almshouses, a charity or blue coat school for 32 boys, and various minor charities. Near the town is Stevenston, the seat of Lord Rolle, who cut a canal in 1823, which skirts the hamlet of Tadlipport, on the opposite side of the Torridge. At this hamlet is a hospital for the poor of the pars. of both Great and Little Torrington. A bowling-green now occupies the site of a castle erected on an eminence S. of the town in the 14th century. The chief occupation of the industrious classes is the manufacture of gloves, which is not confined to the town, but gives employment to many families of the surrounding district.

Torrington appears to have been first chartered by Philip and Mary: it is now governed by a mayor and 8 aldermen, and 12 councillors, who hold petty sessions every three weeks. Other courts formerly held have gone into disuse. Torrington sent mems. to the H. of C. down to the reign of Henry VII., when it appears to have lost or relinquished the privilege. At the restoration, the earldom of Torrington was conferred on Gen. Monk, and it now gives the title of viscount to the Byng family.

TORSHEK, or TORJOK, a town of European Russia, gov. Tver, cap. distr., on the Tverza, 138 m. NW. Moscow. Pop. 16,120 in 1858. The town was nearly burnt down in 1767, since which it has been rebuilt with considerable regularity and with rather wide streets; and though its houses are still generally of wood, its public buildings are mostly of stone; the latter includes a cathedral and 20 other churches, 2 convents, a government house, normal school, and orphan asylum. It is famous for a holy spring, which attracts pilgrims from all directions. Being on the high road from Petersburg to Moscow, it is a place of considerable name, and has three large annual fairs. Its principal manufacture is that of saffron, or coloured and prepared Russia leather. A large traffic is carried on in shoes, gloves, and various articles of this material, embroidered with gold and silver.

TORTOLA, one of the Virgin Islands, in the W. Indies, belonging to Great Britain, lat. 18° 27' N., long. 64° 34' 45" W., between St. John's and Virgin Gorda. It is about 12 m. in length by 3 or 4 in its greatest breadth. Pop. 6,051 in 1861. The island consists of a range of hills rising in some places to the height of 1,600 ft., and encircling a spacious harbour, or basin: they are, for the most part, barren, rocky, and precipitous, and there is but one valley of any extent throughout the island. The town of Tortola is on the W. side of the harbour at the foot of these hills, which rise so close behind it that many of the houses are built within sea-mark, and consequently suffer from damp. The barrack and hospital for the troops are at the SE. extremity of the town, and as they lie open to the trade winds, which blow across the harbour, they are not much incommoded by heat. But considerable sickness, particularly from fever, has been found to prevail among the troops at Tortola.

prov. Sardinian States, div. Alessandria, cap. prov. of its own name, at the foot of a hill crowned by a ruined castle, 13 m. E. by S. Alessandria, on the railway from Alessandria to Piacenza. Pop. 13,218 in 1862. Tortona was a place of considerable strength till dismantled by the French in 1796. It is the see of a bishop, the seat of a court of primary jurisdiction, and has manufactures of silks, and some trade in corn and wine. It appears from inscriptions to have been a Roman colony, under the name of *Julia*.

TORTOSA (an. *Derdosa*), a town of Spain, in Catalonia, on the N. bank of the Ebro, about 25 m. from its mouth, and 93 m. SW. Barcelona, on the railway from Barcelona to Valencia. Pop. 15,830 in 1857. Tortosa is defended by several outworks, and is divided into the old and new towns, both of which are walled. The cathedral is near the river, and under the protection of the castle. The front is Ionic, with massive pillars, some of single stones: the choir is of Corinthian architecture; but the edifice is void of taste, and its interior is much overloaded with ornament. The see of Tortosa is a bishopric, and was very rich. There are several par. churches, nine convents, a Latin school, hospital, and public granary; but, next to the cathedral, the principal edifices are the bishop's palace and the mansion of the Vall Cabra family. Tortosa is the residence of a military governor, the seat of an ecclesiastical court, and has manufactures of earthenware, paper, and leather; a considerable trade in corn and silk, and an active fishery and coasting trade. Within a league of the city are some quarries of valuable marble, known as Tortosa jasper. The *huerta*, or plain of Tortosa, says a traveller, 'is most delightful. Far as the eye can reach, you look down upon a plain covered with vines, olives, figs, pomegranates, apricots, mulberries, and all kinds of grain; and through this fertile vale you trace the meanderings of the Ebro, which is here wide and navigable.'

This town had the privileges of a Roman *municipium* conferred on it by Scipio. On one occasion, during the wars between the Spaniards and the Moors, the women of Tortosa distinguished themselves so much, that, in 1170, the military order of La Hacha, or the 'Flambeau,' was instituted for them. They also enjoyed several privileges, most of which are now lost; but it is said that, in all matrimonial ceremonies, they still maintain the right of precedence.

TOTNESS, a parl. and mun. bor., town and par. of England, co. Devon, hund. Coleridge, on the Dart, 9 m. from its mouth, 20 m. S. by E. Exeter, and 201 m. WSW. London by Great Western and South Devon railway. Pop. of bor. 4,001 in 1861. Area of parl. bor., which comprises the whole par. of Totness with the manor of Bridgetown, 1,411 acres. The town, which is neat and clean, consists principally of one long street, that communicates at its E. extremity, by a bridge of three arches, with the suburb of Bridgetown, on the opposite side of the river. The town is finely situated, the main street gradually rising from the water till it reaches the site of the ancient castle, now a ruin, on an immense artificial mound, commanding an extensive view of the neighbouring country. It was anciently surrounded by a wall, and some of the gateways still remain. The houses are old-fashioned, some of them having piazzas, and their upper stories frequently projecting beyond the lower. But, with the exception of a few on the Plymouth road, all the modern buildings are in the Bridgetown division. The church is a spacious, handsome structure, in the Perpendicular style, with a well-proportioned tower at the W. end which has octagonal pin-

nacles and rich buttresses. In the chancel is a rich stone screen: it has also a stone pulpit, enriched with tracery and shields; but the altar-piece is Grecian, and does not correspond with the rest of the building. This church appears to have been rebuilt about 1432. The living, a vicarage worth 200*l.* a year, is in the gift of the crown. There are meeting-houses for Independents, Wesleyans, and Unitarians, an old guildhall and council-chamber, a small theatre, and assembly-rooms.

Judhael de Totnais, to whom the manor was given by William the Conqueror, erected the castle, and also a Benedictine priory, which, at the dissolution, had a revenue of 124*l.* 10*s.* a year. It has numerous foundations, among which a grammar school, established in 1554, having an income of 70*l.* a year. Totness had formerly a thriving woollen trade, but at present it has no manufactures. Many of the inhabs. are employed in agriculture, some in fishing, and some in navigation, the Dart being navigable to the town for small vessels. It was first incorporated by King John, and is now governed by a mayor, three aldermen, and twelve councillors. It has no commission of the peace, but a court leet is held once a year, and petty sessions occasionally. The bor. has sent two mems. to the H. of C. since the 23rd of Edward I., the right of voting, down to the Reform Act, having been in the corporation and freemen. Registered electors, 363 in 1865.

Among other distinguished individuals, Totness has given birth to Edward Lye, the learned author of the '*Dictionarium Saxonico et Gothico Latium*,' 2 vols. folio, 1772, which, however, he did not live to see printed. It is also the birthplace of Dr. Kennicott, the Hebraist. In his younger days Kennicott was master of the grammar school in the town.

TOUL, a town of France, *dép.* Meurthe, cap. arrond.; on the Moselle, here crossed by a handsome stone bridge of seven arches, 13 m. W. Nancy, on the railway from Nancy to Chalons. Pop. 7,687 in 1861. The town is generally well built, and its streets are macadamised. Its principal buildings are the cathedral, a fine Gothic structure of the 15th century; the town hall, formerly the bishop's palace; the cavalry barracks and magazines, civil hospital, corn-hall, college, and abattoir. Its manufactures comprise calicoes, muslins, woollens, hosiery and earthenware.

This town was anciently the cap. of the *Leuci* conquered by Cæsar. It was ceded by Charles the Simple to the Emperor Henry the Fowler, and was not definitely annexed to France till 1552. Baron Louis, Admiral de Rigny, and several distinguished generals, have been among the natives of Toul.

TOULON, a sea-port town of France, being the second naval port in the kingdom; *dép.* Var, at the bottom of one of the finest harbours of the Mediterranean, 32 m. ESE. Marseilles, and 190 m. SSE. Lyons, on the railway from Marseilles to Nice. Pop. 84,287 in 1861. The town, which is of an oval shape, the longer side facing the sea, rises gracefully towards the N., extending her ramparts to the foot of a chain of high mountains, stretching from the E. to the W. The position of the place would be picturesque and beautiful, were there the least verdure; but the rocks and mountains are arid, bare, and totally destitute of covering, or umbrage of any kind. The town is strongly fortified, being surrounded by a double rampart, and a large and deep ditch, defended to the E., W., and N. by hills covered with redoubts. Among the forts that of La

Malgue (on a peninsula to the SE.) is the most remarkable, not only for its extent, but the solidity of its construction. Toulon is divided into the old and new town; both are tolerably well built, but the streets of the former are narrow and crowded, and all the squares, except one, are small and irregular. The new quarter, in which are most of the naval establishments, is much superior in point of appearance. The principal street, the Rue de Lafayette, which intersects the town in its whole extent, and is partially planted with trees, is the seat of the market, and is a scene of great bustle and activity. It terminates near the port in the Place d'Armes, a handsome square planted with trees, one side of which is formed by the admiralty-house. The town-hall, facing the commercial port, with two colossal statues in front, by Puget, regarded as chef d'œuvres: the house occupied by that distinguished sculptor, the old cathedral, three other churches, the court-house, military arsenal, occupying an ancient convent, naval, military, civil, and foundling hospitals, and a handsome communal college, are the other chief public buildings. Though on an arid soil, Toulon is well supplied with water by springs from the mountains, and several of its numerous public fountains are ornamented with statues. The suburbs are not only increasing, but from the rapid augmentation of the pop. and importance of the place of late years, it has been found necessary to add additional stories to the older houses. Since 1880, two new quarters have sprung up without the walls, one on the road north-eastward to Valette, and the other on the road westward to Ollioulles. The latter is fetid and abominable. It goes by the name of Navarin, and is chiefly occupied by the Genoese labourers, who occupy the same place in this that is occupied by the Irish labourers in most English towns. Owing to its situation at the foot of high bare hills that intercept the winds from the N., and reflect the sun's rays, the climate in summer is extremely hot.

Toulon is the Brest of the Mediterranean, and may be looked upon as the Plymouth of France; though since the construction of the breakwater in Plymouth Sound, the latter is superior as a roadstead to the inner road of Toulon. Both the old and new harbours are artificial. The latter, formed by hollow and bomb-proof jetties, running off from the E. and W. sides of the town, is sufficiently extensive to accommodate 80 sail of the line, as many frigates, and an equal proportion of small craft. The entrance is shut by a boom, and it is never ruffled by any wind to occasion damage. The outer sides of the jetties present two large batteries, even with the water's edge. The entrance to the inner road, on which the harbour opens, is between the Grosse Tour on the one side and Fort Eguillette on the other, about 620 fathoms apart. The road is a good deal encumbered with banks, and the anchoring-ground is, in part, foul and rocky; but in other places this is not the case, and altogether it is a very fine basin. The outer, or great roadstead, to the E. of the latter, bounded on the S. by the narrow peninsula, terminating in Cape Cepët, has deeper water and better anchorage than the inner; but it is open to E. winds, which sometimes throw in a heavy sea. The lazaretto stands on a secure cove, La Veche, on the S. side of the outer road, with from 4 to 8 fathoms water.

The arsenal of Toulon is one of the finest in Europe. It occupies a surface of 354,140 sq. metres (87 acres), and has dry docks, and every accommodation for the construction, repair, and outfit of ships. In general, from 3,000 to 4,000

workmen are employed within its walls: but in some years, when unusual activity prevails in all the French ports, there are between 5,000 and 6,000 labourers employed, exclusive of above 3,500 criminals.

The rope-house, constructed by Vauban, is 1,120 ft. in length and 64 in breadth. The docks, slips, sheds, mast-house, sail factory, and magazines, are on a grand scale, though, as a ship-building port, Toulon has hitherto been inferior to L'Orient and Rochefort. A new arsenal, an appendage to the old, has been recently constructed. The dépôt of oak timber is the largest in France. The *bagne*, instituted in 1682, is, from want of room on shore, established on board some hulks: it is occupied by criminals condemned to hard labour for 10 years and under. The cost of each criminal amounts to about 1 fr. a day. The mercantile port, which is bordered by a fine quay, is shut off from the harbour, for men-of-war, by a line of dismasted vessels.

The imports consist chiefly of corn, flour, salt provisions and timber, for the use of the naval establishments; and the exports, of oil, capers, figs, raisins, almonds, oranges, and other fruits, with cloth, hosiery and soap, manufactured in the town. The trade of the port was formerly inconsiderable, but it increased after the conquest of Algiers, and will probably continue to increase. Toulon is the cap. of an arrond. and two cantons, and is the residence of a naval prefect, a commissary-general, and of numerous other government officers and foreign consuls. It has tribunals of primary jurisdiction and commerce, a board of customs, a college, schools of hydrography and marine artillery, courses of geometry and mathematics, a society of arts, and an excellent naval museum, public library, government, pawn, and savings' banks, a theatre, with a stationary company, and public baths.

Toulon appears to have existed in the time of the Romans. In more modern times it was occasionally attacked by African corsairs, and to defend it from these incursions, Louis XII. commenced the erection of the Grosse Tour at the entrance to the inner road, which was finished by Francis I. Henry IV. commenced the construction of the old port, now appropriated to merchant vessels, in 1594. But it is wholly indebted for its modern importance as a great naval port and a strong military position, to Louis XIV., who expended vast sums on its fortifications, and on the arsenal and harbour. It was unsuccessfully besieged by Prince Eugene in 1707. Having, in 1793, been delivered up by the royalists to the English and Spaniards, it was retaken by the republicans, after a siege in which Napoleon I. gave the first decided proofs of his extraordinary military talents. On evacuating the town the Allies set fire to the magazines, and to the ships they were unable to carry off. The fortifications have since been thoroughly repaired, and several new works constructed, so that it is stronger than ever, and, if properly garrisoned, all but impregnable.

TOULOUSE, or TROULOUSE (an. *Tolosa*), one of the principal cities in the S. of France, dép. Haute Garonne, of which it is the cap., on the Garonne, at the junction of the canals of Languedoc and Briare with that river, 132 m. SE. Bordeaux, on the railway from Bordeaux to Cette. Pop. 113,229 in 1861. The city is very irregularly laid out; its streets, which are mostly narrow, crooked, ill-paved with rounded pebbles from the river, and dirty, form a complete labyrinth. Nearly all the buildings are of red brick cemented with mortar, which, being blackened by

older houses, and those in the lower quarters, consist of sun-dried bricks, in frames of woodwork, and are often dilapidated. The shape of Toulouse is an irregular oval; the city comprises an island in the Garonne, and, on that side, is bordered by good quays: on other sides it has been till lately enclosed by walls, flanked with large round towers. But these are gradually disappearing, and their place is being occupied by good houses and regular streets. The city communicates with the suburb of St. Cyprian, across the Garonne, by a massive free-stone bridge of 7 arches, built in the latter half of the 16th century, at the further end of which a modern triumphal arch has been erected. The principal open space is the Place du Capitole, serving for the grand daily market, which is admirably supplied. This large quadrangle is ornamented at each of its four corners with a handsome fountain. The capitol, or town-hall, from which it derives its name, on its E. side, in the Ionic order, is nearly 180 yards in length. In it are several spacious halls; one is ornamented with the busts of the most distinguished natives of the city; and another, called the Salle de Clemence Isaure, has a marble statue of that distinguished lady, the great patroness of the 'Floral Games.' The theatre occupies one wing of the capitol, but it is badly planned and decorated. The other sides of the square are chiefly occupied by hotels and cafés. Several of the other squares are ornamented with fountains, and planted like the public promenades on the banks of the canals, and the Garonne.

The cathedral is planned on a magnificent scale, but unfinished: the nave, which is the oldest part of the building, probably dates from about the 13th century. The most ancient church, that of St. Servin, has been erected on the site of a very celebrated temple of Apollo: it is a heavy Gothic building, part being said to date from the 9th century, though the greater portion is much more modern, particularly the choir. Among its ornaments is a bas-relief caricature of Calvin, as a hog in a pulpit preaching. The church is rich in relics presented by several popes, and other persons: it has a cupola supporting a lofty spire. The churches of La Daurade and Dalbiade deserve mention: in the former Clemence Isaure is supposed to have been buried, and on the grand altar are preserved the golden flowers presented to the successful poets at the floral games. Toulouse is said to have had, at one period, 80 churches, but many have been converted to other purposes. One serves for the museum, in the picture gallery of which are some productions of the best masters of Italy, with a much larger number of copies; while in the cloisters attached is a fine collection of antiquities excavated near Martres, in 1827. The best modern building after the capitol is the prefecture, formerly the archbishop's palace.

Toulouse was, till recently, ill supplied with water; but it is now amply provided with that necessary, furnished to numerous public and private fountains from a handsome château d'eau, or reservoir. Among the other public buildings may be specified 2 large hospitals, the Ponts-Jumeaux, or double bridge over the 2 canals at their junction, the veterinary school, public slaughter-house, mint, new edifice for the royal court and tribunal of primary jurisdiction; the public libraries, containing together about 60,000 vols., school of artillery, barracks, arsenal, polygon, gunpowder and other large mills. Toulouse is the cap. of the 10th military div. of France, and an archbishop's see. Previously to the Revolution it was the seat of one of the leading French universities; and it has now a

literature, and theology. It has also a royal academy of sciences, societies of medicine, painting, arts, and agriculture, some of which grant prizes to successful candidates, after the example set at the floral games of old. The jardin des plantes at Toulouse is the largest and finest in France after that of Paris.

The floral games, previously alluded to, appear to have been instituted in the early part of the 14th century. They were originally held on the 1st of May, and consisted of a trial of skill among the poets and troubadours of the vicinity, those who recited the best verses receiving the prize, which consisted of golden flowers. Clemence Isaure, the lady mentioned as the great patroness of these games, bequeathed, in 1540, the bulk of her fortune to the civic authorities, to be expended by them in fêtes and prizes at floral games, to be held annually in her house, on the 1st and 3rd of May. These games were finally superseded by the creation of the academy of *belles lettres* in 1694, the directors of which gave prizes for the best papers.

Toulouse has manufactures of coarse woollen cloths, silks, gauzes, printed cottons (*Indiennes*), cotton yarn, tiles and steel wares, paper, wax lights, musical strings, and vermicelli, with dyeing-houses, distilleries, a cannon foundry, and a royal tobacco manufactory. It has also a large trade in the produce of the surrounding country, Spanish wool, and colonial produce.

Nothing is known of the origin of this city but that it is very ancient. It was the cap. of the Tectosages; and having been taken by the Romans, *anno* 106 B. C., they afterwards embellished it with numerous splendid edifices; but, owing to the combined influence of time and the attacks of the barbarians, these structures have been almost wholly destroyed, so that some vestiges of the amphitheatre, and of a few other buildings, are all that now remain to mark the wealth and power of its Roman masters. It was successively the cap. of the Visigothic kingdom of Gaul and Aquitaine, and was then forward governed by its own feudal counts till 1271, when it was annexed to the crown of France.

Toulouse is principally celebrated in recent times for the sanguinary conflict that took place in its vicinity on the 10th of April, 1814, between the allied army, under the Duke of Wellington, and the French, under Marshal Soult. The Allies were superior in point of numbers, but the advantage of position was on the side of the French. Notwithstanding a desperate resistance, the latter were driven from the Mont Rave, and obliged soon after to evacuate the city. The loss on both sides was very great, especially on that of the victors, who had 4,659 men killed and wounded; the French loss amounted to about 3,000 men. Unfortunately, this was a useless sacrifice, as Napoleon I. had already abdicated; but, though the contrary has been stated, it is certain that Marshal Soult was wholly ignorant of the circumstance. (Napier's *Peninsular War*, vi. 639.) Toulouse has given birth to many distinguished individuals, among whom may be specified Cujas, the greatest civilian of modern times, born here in 1520, and Raymond, count of Toulouse, so celebrated in the first crusade.

TOURNAY (Flem. *Doornik*), a town of Belgium, prov. Hainault, cap. arrond. and of two cantons on the Scheldt, close to the French frontier, 45 m. WSW. Brussels, on the railway from Brussels to Lille. Pop. 30,824 in 1860. Tournay covers nearly as much ground as Lille, though so much less populous. Its former fortifications were demolished by the emperor Joseph II. but since

1814 it has been surrounded anew with military works, and has a good citadel. The Scheldt, crossed here by several flying bridges, divides Tournay into two parts, called the Old and New Towns: the latter is well built, and has a fine quay along the river, which forms a favourite promenade; but, excepting its historical recollections, the former has little to render it interesting. The cathedral, a fine Gothic building, with five towers and spires, supposed to have been a bishop's see as early as the 5th century, was formerly richly adorned, but suffered greatly from the French revolutionary phrenzy. The old abbey of St. Martin has been of late years levelled with the ground, to give place to the town-hall and public gardens. Few other buildings are worthy of notice, though there are several hospitals and asylums, including one for aged ecclesiastics, a court of primary jurisdiction, chamber of commerce, exchange, theatre, atheneum, academy of fine arts, and episcopal seminary. Without the walls are several suburbs.

Tournay is one of the most active manufacturing towns of the Netherlands, and must have been celebrated for its industry at a very early period, since it is mentioned in the *Notitia Imperii* of the 5th century as one of the fifteen towns in the empire having manufactures of woollen and linen yarn. At present, three-fourths of its pop. are employed in its various manufactures, and from 12,000 to 16,000 looms are supposed to be employed in its commune. Hosiery, calicoes, and linen fabrics, carnets, yarn of various kinds, waistcoats, and all kinds of articles of dress, with carpets, for which Tournay is famous, are the principal articles of trade; but large quantities of earthenware, bronze goods and hardware, Curaçoa, and other liquors, are made; and there are numerous breweries, salt refineries, tanneries, and dyeing-houses. Tournay has various charitable institutions for the benefit of sick workpeople, and for pensioning the widows of weavers, and children are not suffered to be too laboriously employed. The Scheldt, which is navigable to the town for vessels of 150 tons, is the principal channel for the conveyance to the town of coals, spices, dyeing materials, tobacco, deals, brandy, wines, and for the export of manufactured goods, chalk, and building stone, produced in the town and its vicinity.

Tournay has probably experienced as many vicissitudes as any town in Europe. It is the *Civitas Nerviorum*, taken by Julius Cæsar, and has since belonged to an infinite number of masters, and been taken and retaken over and over again.

TOURS (an. *Cæsaromagus*), a city of France, dep. Indre-et-Loire, of which it is the cap., on the narrow tongue of land between the rivers Loire and Cher, close to the point of their confluence, 127 m. SW. Paris, on the railway from Paris to Bordeaux. Pop. 41,061 in 1861. The older parts of the city consist of narrow, crooked, and dirty streets, with mean and ill-built houses. It is surrounded by planted boulevards on the site of its ancient fortifications, and has 12 different entrances, and 5 suburbs. It communicates with the opposite bank of the Loire by one of the finest bridges in Europe, constructed chiefly between 1762 and 1777: it is of stone, level on the summit, 475 yards in length by 16 in breadth, and has 15 arches, each 26½ yards in span. Over the Cher are two bridges, one of 17 and the other of 11 arches. From the bridge over the Loire a noble street, the Rue Impériale, straight, spacious, bordered with footways, and lined with uniform buildings of freestone intersects the town in its

entire breadth, terminating on the S. in the Avenue de Grammont, leading to the smaller bridge over the Cher. At the commencement of this street, close to the Loire, is a handsome square; in which are the town-hall and the departmental museum, new and symmetrical buildings, the latter containing upwards of 200 paintings. The cathedral is said to have been founded in the 4th century, burnt down in the 6th, rebuilt by Gregory of Tours, but again burnt down in the 12th century; after which its reconstruction proceeded so slowly that it was not completed till 1550. It has a noble front, flanked by two towers, built by Henry V. of England. Its interior, though not beautiful, is richly ornamented, and contains much stained glass, together with the mausoleum of the children of Charles VIII. A curious collection of MSS. is kept in this cathedral. The other churches are mostly small and gloomy, and possess little worth notice. The so-called Tower of Charlemagne is the only remaining portion of the abbey of St. Martin, destroyed in 1797, of which the kings of France used to be the abbés. The archbishop's palace is one of the handsomest in France: the prefecture, court-house, college, general hospital, exchange, theatre, barracks, prison, and a highly ornamented fountain in the market-place, are the other most conspicuous objects. This city is the seat of courts of primary jurisdiction and commerce, a chamber of commerce, council of prud'hommes, societies of agriculture, sciences and arts; and has courses of practical geometry, a library comprising 40,000 volumes, a cabinet of natural history, and botanic garden. It was here that Louis XI. established the silk manufacturers he invited out of Italy; and it was for a considerable period famous for its silks; but it has long been far surpassed in this department by Lyons, which has peculiar advantages for the prosecution of the silk manufacture. Next to that of silk, which is carried on to a considerable extent, the manufactures of Tours consist principally of woollen cloths, carpets, and woollen yarn; but they are not extensive; and the trade of the city is chiefly in the retail supply of its inhabitants and visitors.

'The promenades round Tours,' says an English traveller, 'are charming: among these the elm-avenue is the most conspicuous; the quay is also pleasant. The environs of the city furnish the most agreeable walks; innumerable little paths lead in every direction through the fields, and among the knolls and copses. Tours, 20 years ago, was as cheap a residence as any place on the Loire; but a great advance in the prices of every thing, and particularly house-rent, has naturally followed the approbation of Tours by the English. Immediately after the war, a large house, with every convenience, and a garden of two or three acres, might have been had for 20*l.* a year; but this sum may now be more than doubled. Provisions are still moderate in price, and wood is less expensive here than in most other parts of France.' Besides the English, Tours is much resorted to by French gentry, who, though in independent circumstances, are not rich enough to afford the expense of living in the metropolis. The castle of *Plessis les Tours*, built by Louis XI., where he principally resided, is about 1 m. from the city. It is constructed of brick, is embosomed in wood, and has a venerable appearance. In its chapel is a portrait of Louis, dressed in armour, taking off his helmet to the Virgin and Infant.

Among the eminent men to whom Tours has given birth, may be specified Cardinal Amboise, prime minister of Louis XII., and Rapin, the author of the much admired Latin poem, '*De Cultu Hor-*

torum,' and of several critical publications. Rapin has not forgotten to celebrate the praises of his native city, and the surrounding country:—

'Adde omnem latam rivis et fontibus oram,
Pratorum immensos tractus, et amœna secundum
Flumina, vitiferosque utroque ex littore colles.
Quid memorem variis opulentam mercibus urbem,
Et studia et mores populi, quem, serica texta
Tractantem, fecit cœli clementia blandum?
Adde umbras nemorum æternas; et mollia semper
Gramine prata novo, et nunquam sine floribus hortos.'
Lib. i. line 489, ed. de Brotier, Paris, 1780.

Gre court, the poet, was also a native of Tours; and St. Gregory, hence called Gregory of Tours, was for a lengthened period bishop of the see.

Tours was anciently the cap. of the *Turones*, conquered by Caesar, anno 55 B.C. In the 5th century it became the cap. of the 3rd Lyonnaise. After many vicissitudes it fell into the hands of the Plantagenets, and formed a part of the English dominions, till 1204, when it was annexed to the French crown.

TOUMEN, a considerable town of Asiatic Russia, gov. Tobolsk, on the Toura, 120 m. SW. Tobolsk. Pop. 10,950 in 1858. The town is situated in a fertile tract, and its inhabs. are said to be both wealthy and hospitable. In almost every house the manufacture of a coarse kind of carpeting sold all over Siberia is carried on; and its tanneries, which are more extensive than any others in the government, employ nearly 800 workmen, and produce goods to the value of more than 1,000,000 roubles a year. In the neighbourhood are extensive forests, and vast quantities of mats, with carriages, and various wooden articles, are made for exportation; besides which the town has a large trade in timber, tallow, hides, embroidery, vegetables grown in the vicinity, and cattle. It was the first town founded by the Russians in Siberia, having been built in 1586, on the site of a previous Tartar city called *Tchinghis-Tora*, or 'the town of Genghis.'

TOURNUS, a town of France, dép. Saône-et-Loire, cap. cant., on the Saône, on the railway between Macon and Chalons, 16 m. NNE. the former, and about the same distance S. the latter. Pop. 5,598 in 1861. The town stands on a declivity crowned by the remains of a Benedictine abbey, which formerly possessed extensive privileges. It is clean, well-built, and has some good public edifices. Its trade is principally in corn, wine, and building stones, sent down the Saône to Lyons.

TOWCESTER, a market town and par. of England, co. Northampton, hund. Towcester, on the Tow, here crossed by three bridges, 8 m. SW. Northampton. Area of par. 2,790 acres. Pop. 2,715 in 1861. The town consists principally of three streets, at the union of the roads from Stony Stratford, Northampton, and Daventry. It stands on the ancient Watling Street, and was probably a Roman station. The church is a neat edifice, supposed to date from the 11th century. The living, a vicarage, worth 217*l.* a year, is in the gift of the bishop of Lichfield and Coventry. Here are chapels for various dissenting sects; a grammar-school, founded at the dissolution of the monasteries, and endowed with part of the revenues of a college dating from the reign of Henry VI., and several almshouses. Markets on Tuesdays: fairs, four times yearly.

TRAFALGAR (CAPE), a promontory of the SW. coast of Spain, prov. Andalusia, 25 m. NW. Tariffa, in the Strait of Gibraltar, of which it forms the NW. extremity; lat. 36° 10' 15" N., long. 6° 1' W. This cape, which in antiquity was called the promontory of Juno (*Junonis promontorium*),

s low, and terminates in two points, the most easterly of which is surmounted by a round tower.

Cape Trafalgar is famous in history for the great battle fought in its vicinity on the 21st of October, 1805, between the combined French and Spanish fleet, under Admirals Villeneuve and Gravina, and the English fleet under Lord Nelson. The former had 33 sail of the line and 7 large frigates, while the fleet of the latter only amounted to 27 sail of the line and 3 frigates; but the superior skill and gallantry of the British admiral, and of his officers and men, far more than compensated for the nominal inferiority of the English fleet, and secured for the country the greatest naval victory recorded in her annals. No fewer than 19 French and Spanish line of battle ships were captured, and 4 that had escaped from the action were subsequently taken by Sir Richard Strachan, the other vessels that escaped into Cadiz being, at the same time, mostly rendered unserviceable. Unfortunately this great and decisive victory was not acquired without a very heavy loss. Nelson, who was mortally wounded early in the action, lived only to be made aware of the destruction of the enemy's fleet.

TRAJANOPOLI (called by the Turks *Orikhovo*), a town of European Turkey, prov. Roumelia, sanj. Gallipoli, on the Maritza, 45 m. SSW. Adrianople, lat. $41^{\circ} 7' 30''$ N., long. $26^{\circ} 18' 15''$ E. It is said to have a population of 15,000 inhabitants; is the see of a Greek archbishop, and has a considerable commerce.

TRALEE, a parl. bor. and marit. town of Ireland, prov. Munster, co. Kerry, of which it is the cap., within about 2 m. of the head of Tralee Bay, near the Ballymullen river, 55 m. NW. Cork, with which it is connected by railway. Pop. of parl. bor., which includes an area of 546 acres, 10,191 in 1861. The public buildings and establishments comprise a handsome par. church, two large Rom. Cath. chapels, a nunnery, to which an excellent school for girls is attached, several meeting-houses for dissenters, a new county court-house, a handsome and commodious structure, a fever hospital, a lunatic asylum, a county infirmary, and infantry barracks for 600 men. The town stands on the estate of Sir Edward Denny, who has thrown open the pleasure-grounds, attached to the castle in its immediate vicinity, to the inhab. Sir E. Denny is also patron of the living of Tralee, worth above 400*l.* a year. Exclusive of the girls' school, Tralee has a Catholic free-school, and other schools, two of which are subordinate to the board of education in Dublin. It sent 2 mems. to the Irish H. of C., and since the union it has sent 1 mem. to the Imperial H. of C. Previously to the Reform Act the right of election was nominally vested in the old corporation, dissolved by the act 3 & 4 Victoria, cap. 108; but it was, to all intents and purposes, a nomination bor. There were 315 regis. electors in 1865. The co. assizes are held here, and general sessions four times a year, and petty sessions on Tuesdays. It is also a constabulary and coast-guard station. The Tralee workhouse was opened in 1844. Markets on Tuesdays and Saturdays: fairs, May 3, August 4, October 9, November 7, and December 13.

The port is included in that of Limerick. Owing to the shallowness of the water in the river, barges of more than forty tons were, till lately, loaded and unloaded at Blennerville, about 2 m. SW. from the town, while vessels of greater burden were compelled to load and unload by means of lighters, at the Samphire islands, in the bay, about 6 m. W. from the town. With the view of obviating this inconvenience, a ship canal, 15 ft. deep, has been cut from the bay to a basin adjacent to the town,

where vessels of 300 tons may now load and unload. This canal has been of great service to Tralee. The shipping belonging to the port on the 1st of January, 1864, consisted of 14 sailing vessels, of a total burthen of 466 tons. The customs' revenue amounted to 18,791*l.* in 1863.

TRANI, a sea-port town of S. Italy, prov. Bari, cap. cant. on the Adriatic, 26 m. NW. Bari. Pop. 22,356 in 1862. The town is surrounded by a bastioned wall, with a fosse on the land side, and has a citadel, but is not a place of any strength. The streets, which are narrow and dirty, are flanked with ill-built houses, except round the port, where there are some private dwellings that would not disgrace the best parts of Rome. Its large cathedral, erected more than six centuries ago, is in a very mean taste, with preposterous ornaments and clumsy pillars. Exclusive of the cathedral it has about 20 other churches, with 6 convents for monks (one of which, the monastery of St. Clare, is a magnificent structure), 2 nunneries, an orphan asylum, a large seminary, and a theatre, said to be inferior only to those of Naples. Trani is the seat of a superior criminal court, of a civil tribunal for the prov., and is the residence of many old families. It labours under a great deficiency of spring water, so that the inhabitants are obliged principally to depend on rain water collected in cisterns. It exports corn, oil, sweet wine of good quality, figs, almonds, and other products of the vicinity. Some cotton stuffs are produced in the town, of cotton raised in the cant. The ramparts command a fine view both towards the interior and the sea. The harbour, which is nearly encircled by the town, has naturally deep water, but owing to the accumulation of sand thrown in by the sea, and of the filth from the surrounding houses, it is so much filled up as to be accessible only to the smallest boats, while in summer the stench is intolerable. The few vessels that carry on the languishing trade of the town are obliged to anchor about 2 m. off shore, being laden by lighters.

In 1502 a contest took place under the walls of this town, between eleven French and as many Spanish knights. The combatants fought till there remained only six Spanish and four French knights: the latter then alighted and defended themselves behind their horses, as behind a rampart, till night put an end to the contest.

TRANQUEBAR, a town and seaport of British India, formerly belonging to Denmark, on the Coromandel coast, between two arms of the Cavery, 140 m. SSW. Madras; lat. $11^{\circ} 0' 15''$ N., long. $81^{\circ} 54' 30''$ E. Pop. of the town and its small territory, about 20,000. Tranquebar is surrounded by bastioned ramparts, faced with masonry, and at its SE. angle is the citadel of Dansburgh, in which is an old castellated building, serving for the government offices, and having a lighthouse on its highest point. The town is small, but very neat and clean, there not being a native hut or other mean structure within its walls. The principal streets may be called handsome, the whitened houses being of two or three stories, with little Grecian porticoes of three or four pillars projecting into the street, and windowed generally with rattan lattices. The government house, two Protestant churches, and a Portuguese Rom. Cath. chapel, are in the town. There is no harbour in the Cavery for vessels of a larger class than boats, which have accordingly to anchor outside the surf in the bay. It has, however, some traffic by sea with Beugal, the Malabar coast, the Straits' settlements, and Ceylon: it has also manufactures of salt and cotton goods. The town and its surrounding territory belonged to Denmark from 1755

till 1846, and in the latter year was ceded to Great Britain.

TRANSYLVANIA (Germ. *Siebenbürgen*, Magy. and Slav. *Erdeli*, an. *Dacia Mediterranea*), the most E. prov. of the Austrian empire, comprised between the 45th and 48th degs. N. lat., and chiefly between the 22nd and 26th E. long., having Hungary on the N. and W., and on the E. and S. Moldavia and Wallachia, from which it is separated by the main chain of the Carpathians. It is of a square shape: greatest length and breadth about 140 m. each. Area, 20,400 sq. m. Pop. 1,926,797 in 1857. Most part of the surface is covered with ramifications of the Carpathian mountains, which rise in Mount Bukhest, near Kronstadt, to nearly 8,700 feet in height: these, however, give place in the N. to the valley of the Szamos, in the centre to that of the Maros, and in the S. to that of the Aluta. All these rivers, of which the Maros is the principal, rise in Transylvania, and have, more or less, a W. course, the general slope of the country being towards the W. The first two are tributaries of the Theiss, the last joins the Danube in Wallachia: the banks of all, and particularly the Maros, are densely wooded, (whence the modern name of the prov.), and possess considerable picturesque beauty. It is in general well watered, and in the S. are some extensive marshes. As the country at large is rather an elevated table land, the climate is cold, though in most parts healthy. The soil is of various qualities: the mountains are generally granitic or calcareous, but the plains and valleys are often very fertile, and, notwithstanding the backwardness of agriculture, a surplus of corn over the quantity required for home demand is generally produced. Wheat, barley, oats, rye, buckwheat, and maize, most kinds of pulse, potatoes, and garden vegetables are cultivated; wine is one of the leading products of the country; in the orchards, apples, pears, plums, apricots, almonds, mulberries, and chestnuts are grown; and tobacco, hemp, flax, saffron, and clover are ordinary crops. The lands are, in general, held under a feudal tenure, as in Hungary, except in the Saxon-land, which division of the province is by far the best and most industriously cultivated.

Transylvania is divided principally among three distinct nations,—the Magyar, the Szekler, and the Saxon, each of which has a share in the government of the country. They inhabit different districts: the Magyars (with the Wallachs) occupy the whole W. and centre; the Szeklers the E. and SE.; and the Saxons, the greater part of the S., with a portion of the NE. (Paget, ii. 360, and Map.) The first occupy at least three-fifths of the entire principality, of which Clausenberg is the cap., and the Szeklers and Saxons about one-fifth each; Maros-Vasarahely being the chief town of the former, and Hermanstadt of the latter. With these races are intermixed a number of Poles, Gypsies, Jews, and Armenians. About one-half of the pop. are Wallachs, while the Magyars number nearly 500,000, the Saxons 300,000, and the Szeklers 200,000. The Magyars and Wallachs have been already described under HUNGARY. The Szeklers, termed by the Latin writers of the Lower Empire *Siculi*, are probably the descendants of a barbarian horde that had settled in the province during the decline of the Roman power. The Magyars, on entering the country in the tenth century, finding the Szeklers cognate with themselves in features, language, and character, left them in the undisturbed possession of the lands they had inherited, on condition of their guarding the Magyar frontier on that side. They were not even rendered tributary, and to this day the Szeklers hold them-

selves to be noble born, free, and equal. But in the lapse of centuries many changes have crept into their condition. 'The richer and more powerful,' says a traveller, 'have gradually introduced on their own estates the system in operation in other parts of Transylvania, and the peasant and the seigneur are now found in the Szekler land as elsewhere. Titles, too, and patents of nobility have been freely scattered through the country; taxation, also, and the forcible introduction of the border system, instead of the desultory service of former times, have made great changes. As almost all these changes, however, have been introduced without the consent of the people, and often by the employment of open force, they are still regarded as illegal by the Szeklers, who are consequently among the most discontented of any portion of the Transylvanians.'

The Saxons appear to owe their origin to a colony transplanted thither from the Rhine by one of the sovereigns of Hungary in the twelfth century. They live under a count or chief, who, like their clergy, is elected by themselves; and they enjoy freedom from tolls within their district, and other important privileges. 'One of the fundamental laws of the Saxons,' says the traveller just quoted, 'is the equality of every individual of the Saxon nation. They have no nobles; no peasants. Not but that many of the Saxons have received letters of nobility, and deck themselves out in all its plumes; yet, as every true Saxon will tell you, that is only as Hungarian nobles, not as Saxons. Their municipal government was entirely in their own hands; every village chose its own officers, and managed its own affairs, without the interference of any higher power. But a few years ago, a great and completely arbitrary change was made in this institution; the effects of which have been to deprive the Saxon communities of the free exercise of their privileges, and to deliver them into the power of a corrupt bureaucracy, over which they have little or no control. The Saxons, however, are a slow people, and though they have long complained, they have scarcely ever ventured to demand a restitution of their rights. Hitherto they have been among the most certain adherents of the crown: they have rarely joined the liberal party. They preserve, for the most part, the dress, language, and habits their ancestors brought with them from Germany. For the rest, the Saxons are undoubtedly the most industrious, steady, and frugal of all the inhabs. of Transylvania; and they are consequently the best lodged, best clothed, and best instructed.'

The peasants of Transylvania are in a more depressed condition, and much more ignorant, than those of Hungary. It is rare that the peasant's cottage has more than two rooms, sometimes only one; his furniture is scanty and rude, his crockery coarse, and those little luxuries which in the Hungarian denote something beyond the indispensable are rarely seen in Transylvania. The ignorance of the Transylvanian peasant is often intense, and he is generally superstitious and deceitful: these qualities are most conspicuous in the Wallachs, but the Magyars are by no means free from them. Schools are extremely rare. The peasants belonging to the Greek church are undoubtedly the most ignorant; those of the Unitarian and Lutheran churches the best educated. 'We had remarked,' says Mr. Paget (Hungary and Transylvania, ii. 311), 'throughout the Szekler-land generally, a better state of cultivation and greater signs of industry than in most other parts of Transylvania. But the Saxon-land, on the Aluta, appeared like a garden in comparison even with the former. The whole plain seemed alive with ploughs and

harrows, and on every side teams were moving about, manure was spreading, and the seed was being scattered abroad with a busy hand. The most startling feature in the picture was the very active part taken by the women. Some were sowing corn, others using the fork and spade, others holding the plough, and others driving the team.

Transylvania may hereafter rank high as a wine growing country: it abounds with declivities of a rugged or volcanic soil. No less than one-ninth part of its present pop. is dependent on the culture of the vine; all the gentlemen, and even superior tradesmen, grow their own wines. The mode of making them is very ill understood; but there are several superior kinds of wine produced, mostly in the valleys of the Maros and its tributaries. They are in general white, well flavoured, and full bodied. The highest price, in an ordinary year, of the better sorts is about 2s. the *eimer* (16 bottles).

The rearing of horses and other live stock is one of the most important branches of national industry. In the Szekler mountains, a small wiry horse, similar to the Welsh pony, appears to be indigenous; but, for improved breeds, no less than sixty celebrated studs are said to exist in this small territory, twenty of which have probably a greater or less infusion of English blood, the English breed and modes of treatment of horses having been introduced of late years. Buffaloes, scarce in Hungary, are common here. The sheep, which are long-woolled and curly-horned, are sent into Wallachia to graze in the winter. The oak and beech forests, which are estimated to cover nearly 8,940,000 acres, feed large quantities of hogs.

The mineral produce is a principal source of the wealth of Transylvania. There are numerous gold mines in the country, and almost every stream and river is auriferous; the annual produce of gold is estimated at from 2,000 to 2,500 marcs, and of silver 5,000 marcs. The gold mines of Zalathna, in the basin of the Maros, are supposed to have been wrought ever since the time of the Romans; and those round Nagy Banya are certainly of that era. From the latter, and some other mines, the ore is sent off monthly to Kremnitz, to be smelted. Gold-washing in Transylvania is almost monopolised by the gypsies. Government grants a gypsy band the privilege of washing the sands of a certain brook, on condition of their paying a yearly rent, which is never less than 3 ducats of pure gold per head for every washer. A gypsy captain settles this matter with the government, and is answerable for the rest of the tribe, from whom he collects the whole of their earnings, which he re-divides among them after paying the tribute. Iron, lead, copper, antimony, arsenic, and mercury in the form of cinnabar are also found in Transylvania; and the mines of Izeckerem are the richest in tellurium of any in Europe, and those in which metal was first discovered. Marshal Marmont (*Voyage en Hongrie*) states that coal, of very good quality, is found in some parts; but it is not made use of. Salt is much more important: rock-salt abounds at Maros and Szamos-Ujvar, about 600,000 centners being annually produced, which, excepting about 30,000 centners consumed in the neighbourhood, is wholly exported to Hungary. The miners work from 3 to 11 A.M., and get about 10d. a day. The centner of salt is delivered at the pit's mouth for about the same sum, and sold in Transylvania at 3½ flor. or 7s. the centner. The greater part, however, is sent by the Maros to Szegedin at an expense of

den or 15s. the centner. The E. of Transylvania is supplied from mines in the Szekler-land. Alum, sulphur, saltpetre, sulphate of soda, and many crystals and inferior kinds of gems, are found in the prov.

Except those of woollen, cotton, and some other fabrics in Cronstadt, Hermanstadt, and other parts of the Saxon-land, few manufactures are carried on to any great extent. Woollen and linen stuffs, cotton fabrics, hats, leather, shagreen, potash, earthenware, paper, and gunpowder are made in different places; the clothing of the peasants being generally of domestic manufacture. Some forges, breweries, and vinegar factories are scattered over the country; but woollen, silk, and linen fabrics, jewellery, hats, and glass wares are principally imported from abroad, in return for salt, corn, cattle, horses, hogs, hides, wax and honey, timber, metals, and other raw produce. The trade is mostly in the hands of the Greeks and Armenians; and, as yet, little facility is afforded for commerce with Hungary and Wallachia. The Maros and Szamos are navigable, and are the chief routes for the conveyance of goods. The roads and bridges are everywhere in the most wretched state.

Transylvania sends deputies to the Hungarian diet; but has also a diet of her own, composed, in 1868, of 165 members, of which number 125 were elected by the people, and 40 nominated by the crown. In the elections every man has a vote who has attained the age of twenty-four, and pays direct taxes to the amount of 8 florins, or 15s.; and capable of being elected are all citizens of the age of thirty who are 'of irreproachable character.' Magyar Transylvania is divided into eleven counties; the Szekler-land into five, and the Saxon-land into nine *stuhls*, besides some subordinate districts. The government of the Magyar counties and Szekler *stuhls*, and of the towns, is nearly the same as in Hungary: that of Saxon Transylvania has been already noticed. In the cap. of each co. and *stuhl* is a court of primary jurisdiction, subordinate to the Transylvanian chancery at Vienna. A band or zone of country along the S. and E. frontier, with a pop. of about 140,000, forms the Transylvanian military frontier. Here are maintained two Wallach and two Szekler infantry border regiments, and one regiment of Szekler hussars. The inhabs. of this tract are subject to the Austrian military frontier laws.

The majority of the clergy, and particularly the Wallach priests of the Schismatic Greek church, are little superior to the peasantry in point of education. Those of the United Greek church are better educated, having a lyceum, gymnasium, and normal school at Balasfalva, and enjoy the same general privileges as the clergy of the Rom. Cath. faith, which is that most favoured by the government, and entitled to the tithes in case of dispute. The great body of the Protestant clergy is also derived from the poorer classes of society; and its members, during the period of their education, are commonly maintained by the lord of the village to which they belong, till sent to college. Besides six gymnasia, the Calvinist church has four superior colleges, one of which, that of Enged, stands higher for general education than any other college in Transylvania, and has an annual revenue of 1,000l. The Lutherans have a college at Cronstadt, and seven gymnasia. The government of the reformed churches in Transylvania is somewhat like that of the Presbyterian church of Scotland. The Unitarian is an established religion in Transylvania, where it was introduced by the Polish queen of Zabolva I. in the sixteenth

religion of the court. The Unitarians include all the Poles, with some of the Magyars and Szeklers, and reside chiefly in the Szekler-land, where they have about 100 churches: they have a college at Klausenburg, and two gymnasia elsewhere.

'The habits of society in Transylvania,' says an English traveller, 'in many respects differ little from those of England about the end of the last century. In some of the old fashioned houses almost a patriarchal simplicity is kept up. The houses of the richer nobles are large and roomy, and their establishments are conducted on a scale of some splendour. It is true that they are deficient in many things which we should consider absolute necessities; but, on the other hand, they exhibit many luxuries which we should consider extravagant with twice their incomes. It is no uncommon thing, for instance, in a one-storied house, with a thatched roof and an uncarpeted floor, to be shown into a bedroom where all the washing apparatus and toilet is of solid silver. Bare white-washed walls and rich Vienna furniture; a lady decked in jewels which might dazzle a court, and a handmaid without shoes and stockings; a carriage and four splendid horses, with a coachman whose skin peeps out between his waistcoat and inexpressibles,—are some of the anomalies still to be found in Transylvania.'

This principality had been connected with Hungary for many centuries previously to the conquest of that country by the Turks, after which it threw off its allegiance, and became a quasi-indep. kingdom, alternately tributary to Turkey, or under the influence of Austria, to which latter empire it was annexed by Joseph II. in 1699. Since this period it has enjoyed comparative tranquillity.

TRAPANI (an. *Drepanum*, from *Δρέπανον*, a scythe, the tongue of land on which it is built being curved in the form of that instrument), a sea-port town of Italy, island of Sicily, cap. prov., dist. and cant. of same name, on a projecting point of land on the W. coast of the island, 46 m. W. Palermo, the light-house on Colombaria rock, at the mouth of the harbour, being in lat. $38^{\circ} 2' N.$, long. $12^{\circ} 30' 18'' E.$ Pop. 30,337 in 1862. Trapani is a military post of the second class, being surrounded by a wall and bastions, with ravelins in good repair, and covered by a glacis. The harbour, on the S. side of the town, is protected by Sigia fort, at the extremity of the tongue of land on which the city is built, the fire of which is crossed by that of a battery on Colombaria rock. The castle, in the N. angle, though unworthy of the name, is the residence of the governor and other military authorities. The streets are regular, and the town is commodious and pretty well built. The cathedral and senatorial palace are fine edifices. It has many convents and nunneries, and nearly 40 churches with 2 hospitals, a college, 2 seminaries, and an oratorio. The church of San Lorenzo is said to be 'a simple and majestic specimen of correct architecture.' Despite the number of its priests and friars, its inhabs. are industrious and enterprising, and afford the best artisans and sailors of the island. It has produced excellent scholars, painters, and architects, and the art of engraving on gems, which had been lost during the dark ages, was here recovered and brought to perfection by Mazarielli. Many of the inhabs. are distinguished as sculptors and carvers of coral, amber, wood, shells, rings, and alabaster. To the W. of the town is a well designed promenade. The harbour is said to have been much damaged by the great earthquake of 1542; but though small it is secure, and might be easily enlarged. It has a tolerably good mole, on which is the pratique

office, accessible to vessels of 300 tons, vessels of larger burden anchoring near the Colombaria, in 8 or 9 fathoms water, muddy bottom. Water is conveyed to the town by an aqueduct from the foot of Mount San Giuliano (an. *Eryx*), a little to the NE. of the town.

The trade of the town is very considerable. The *salinas*, a little to the SE., are the most extensive of any in the island. The salt, which is of good quality, is largely exported. The Trapanese carry on the coral fishery on the coast of Africa to a considerable extent, and the cutting and polishing of coral is one of the principal branches of industry carried on in the town. Besides salt and coral, the exports comprise soda, alabaster, rough or cut into vases, statues, and a variety of other articles.

Excepting vestiges of the mole formed by Fabius to join Colombaria to the continent, 2 mutilated lions' heads, that grace a fountain, and some fragments of marble, there are no remains of antiquity here, though coins of Drepanum have been occasionally found. Drepanum is very ancient. It is represented by Virgil as having been visited by Æneas, and as the place where Anchises breathed his last. (*Æneid*, iii. lin. 707.) It was early occupied by the Carthaginians; and, from its advantageous position and excellent port, was considered by them as of the first importance. During their struggle with the Romans it was the scene of frequent contests. Of these the most celebrated was the great sea-fight anno 287 B.C., between the Roman fleet under the consul Claudius Pulcher, and the Carthaginian fleet under Adherbal. The latter gained a complete and decisive victory, with comparatively little loss on their part. (Polybius, lib. i. cap. 4.)

TRAVANCORE, a state of Hindostan, subsidiary to the British, and forming the S. extremity of the Indian peninsula, between the 8th and 10th degs. of N. lat., and the 76th and 78th degs. of E. long., having E. the British districts, Tinnevely and Dindigul, N. Cochin, and on other sides the Indian Ocean. Length, N. to S., about 140 m.; breadth, 60 m. in the N., and gradually diminishing to 20 m. in the S. Area estimated at nearly 4,600 sq. m., and pop. at somewhat less than 1,000,000. The surface, which is varied with hill and dale, rises in the E. into a mountain chain, covered with forest trees and jungle. It is well watered; and highly adapted by its climate to the wet cultivation, and rice is grown in large quantities; besides which, pepper, cardamoms, cassia, ginger, turmeric, betel nut, and cocoa nuts are among the chief vegetable products. Tobacco is principally imported from Ceylon, and is a government monopoly, from which the rajah is stated to derive a revenue of 13 lacs of rupees a year. Elephants, buffaloes, and large tigers inhabit the more remote parts, and ivory, bees' wax, and some other valuable animal products are among the exports. Indications of coal are said to be met with. The land is assessed on the ryotwar system, a fresh survey being made every 10 or 12 years. Lands, the property of the government, are assessed according to the quantity of seed sown on them, and the rent in general amounts to less than half the produce: lands, the property of individuals, pay, in many cases, under 5 per cent. on the produce. The lowness of the land-tax was formerly compensated for, to the native government, by the monopolies of pepper, betel, cardamoms, and other valuable products, which the inhabs. were obliged to supply to the state at very low prices. Most of these monopolies were destroyed, and replaced by a more equitable system of taxation when the country came under the ad-

ministration of the British. Except, however, as respects the lightness of the land-tax, the native government of Travancore was most oppressive. There was a chain of officers from the *dewan* to the lowest inhab., exercising all the powers of government, military, judicial, civil, and revenue, without any check or control whatever; and, besides this, several of the subordinate classes, subject to a capitation-tax, were formed into companies of about 100 men each, under a separate officer, and obliged to perform all kinds of work for the benefit of the government at the pleasure of the revenue servants. Under the British, this chain of revenue servants was abolished with the capitation-tax, and the various monopolies, except those of pepper and tobacco. At the same time, however, the land-tax was increased, a circumstance which in so far countervailed the other improvements.

Travancore, being an integral portion of the anc. Malabar, the prevailing usages and customs are generally similar to those which prevail along the adjacent parts of the W. coast of Hindostan. The nominal sovereignty of the country, honorary dignities, and even property, descend in the female line, as in Canara. The former ruling family is Hindoo, and the principal part of the pop. consists of Brahmins and Nairs; but there are also many Moplas (Mohammedans), and it is estimated that, in Travancore and Cochin, there are 100,000 Syrian Christians. In some communities, Christian churches are considerably more numerous than pagodas or mosques. The Travancore rajah, about the middle of last century, subdued most of the smaller states in his neighbourhood, and extended his dom., but, in 1796, these would have fallen a prey to Tippoo Saib but for British intervention. The final subsidiary treaty with the British was entered into in 1809. Principal towns, Trivanderum, the cap., Anjengo and Quilon; Travancore, the former cap., is now in a state of decay.

TREBIZOND (an. *Trapezus*), a city and seaport of Asia Minor, on the S.E. coast of the Black Sea, 120 m. N.W. Erzeroum; lat. $40^{\circ} 1' N.$, long. $39^{\circ} 41' 52'' E.$ Pop. variously estimated at from 15,000 to 30,000. The town is built on the slope of a hill declining to the sea, and backed by steep eminences rising behind. Its central portion is surrounded by a castellated and lofty wall: on either side of the walled portion is a deep ravine, filled with trees and gardens, both ravines being crossed by bridges. Overlooking the town is a citadel; but it is dilapidated and neglected, and commanded by neighbouring heights. The walls of the city are, however, sufficiently strong to serve as a defence against troops without artillery. The space included within the walls is of great extent, but it is principally filled with gardens and plantations. The houses, which are mostly built of stone and lime, and roofed with red tiles, have in general only a ground-floor, and as each is environed by a garden, the town from the sea has the appearance of a forest, scarcely a house being visible. The walled city is solely inhabited by Mohammedans; the Christians live outside the walls (principally in the eastern suburb), where are also most of the bazaars and khans. Besides nearly 20 churches and chapels, still retained for the service of the Greeks and Armenians, almost all the mosques have formerly been Christian churches. The handsomest mosque is that of St. Sophia, 1 m. W. of the city. It is of small dimensions, built of hewn stone, in the form of a cross, and divided into a nave and 2 aisles, lighted from a cupola supported by 4 marble pillars. The principal entrance is adorned with 4 white marble pillars. The principal entrance is

adorned with 4 white marble Corinthian columns: the Roman eagle is conspicuous over the gate below it are numbers of small reliefs, and a beautiful cornice runs round the exterior of the edifice. Several of the other mosques and churches are in the same style; but the most curious edifice in the city is the *bezestein*, a huge square structure with two small windows in each front, probably erected by the Genoese as a powder magazine. A high square tower and the massy remnants of many other buildings crown the eminences near the mosque of St. Sophia; but none of these, nor any other remains at Trebizond, are of an age anterior to the Christian era.

Trebizond has two ports, one on either side of a small peninsula projecting from the town into the sea. That on the E. is the best sheltered, and is the place of anchorage for the largest ships. It is exposed to all but S. gales; but it does not appear that, with ordinary precaution, any danger need be apprehended. The ground from $\frac{1}{4}$ to $\frac{1}{2}$ m. E. from the point is clean, and holds extremely well. Ships moor with open hawser to the N. and a good hawser and stream-anchor on shore as a stern-fast. At night the wind always come off the land. After the autumnal equinox, the Turkish and European vessels resort to Platana, an open roadstead, about 7 m. to the W. of Trebizond. In antiquity, and in more modern times previously to the conquest of Constantinople by the Turks and the exclusion of all foreign vessels from the Black Sea, Trebizond was the seat of an extensive trade. It is the natural emporium of all the countries to the S.E. of the Black Sea, from Kars on the E., round by Diarbekir to Amasia on the W. Previously to 1830, however, its trade had dwindled to the export of a few products of the country to Constantinople, the import of iron from Taganrog, and a traffic with Abassah, carried on in small craft, which carried away salt, sulphur, lead, and Turkish manufactures, bringing in return the raw productions of the Caucasus, and slaves. But the treaty of Adrianople, by opening the Black Sea to European ships, restored the old channel of communication between Europe and India, and Persia, through Trebizond; and the Russian policy of 1831, by putting an end to the immunities enjoyed by the Russian ports S. of the Caucasus, has given Trebizond an importance it did not previously possess. Its principal articles of import are manufactured cottons, mostly from Great Britain, sugar, coffee, rum, salt, tin, and wine. More than half the articles imported are destined for Persia. The exports to Europe consist of silk, sheep's wool, tobacco, carpets, shawls, galls, and drugs of various sorts, box-wood, nuts, with some wax, honey, and beans to Constantinople; but all in comparatively trifling quantities. Rich veins of copper and lead exist in the neighbouring mountains, but they are badly wrought.

This city was originally founded by a colony from Sinope, but subsequently outstripped its parent city, and all its sister ports along the coast, in wealth and importance. It was a flourishing emporium when it was reached by Xenophon and the Ten Thousand at the close of their memorable retreat. It continued to be an important city of the Greek empire till the subjugation of the latter by the Crusaders, when its duke, of the Comneni family, assumed the dignity of emperor. His dominion extended from Sinope to the Phasis, and his family reigned for more than 250 years, till Trebizond came into the possession of the Turks in 1460.

TREGONY, a market town of England, co. Cornwall, hund. Powder, par. Cuby, on the Fal,

16 m. SW. Bodmin. Area of par. 2,410 acres. Pop. of par. 699 in 1861. The place would not be worth notice but for the circumstance of its having sent 2 mems. to the H. of C. from 1599 down to the passing of the Reform Act, when it was most properly disfranchised. The right of election was in potwallopers residing within the bor. The pop. is almost exclusively agricultural.

TRENT, or TRIENT (an. *Tridentum*), a town of the Tyrol, but within the natural limits of Italy, on the Adige, which is here crossed by a fine bridge, 14 m. NNE. Roveredo, on the railway from Verona to Botzen. Pop. 14,350 in 1857. The town stands in a small but beautiful valley; being, however, from its elevation, exceedingly cold in winter, and, from the reflection of the surrounding mountains, equally hot in summer. It is surrounded by a pretty high wall, is well built with houses in the Italian style, has well-paved though irregular, narrow, and dirty streets, and a square ornamented with a handsome fountain. The palace belonging to the old prince-bishops of Trent, in a corrupt Gothic style, is of large dimensions, has some good apartments, fine fresco paintings, rare marbles, and extensive gardens. It has also a cathedral and several other churches; in one of which, Santa Maria Maggiore, the famous council held its meetings. It has also three convents for monks, and a nunnery, a large hospital, an orphan asylum, a lyceum with several professors, and a gymnasium; with manufactures of silk and other fabrics. It is one of the seats of the transit trade between Germany and Italy; and exports wine, corn, tobacco, and iron, produced in the surrounding country.

This town, which is very ancient, became, in the middle ages, the cap. of a lordship under its bishops, by whom, in 1363, it was united to the Tyrol, in which it has since been comprised. The bishopric was secularised in 1803, but the bishop is still in the enjoyment of a handsome revenue. Under the French it was the cap. of the dép. of the upper Adige, and is now the seat of the government of the circle of the same name. But the celebrity of Trent is entirely owing to its having been selected as the place of meeting for the famous general council of the church, convoked by Pope Paul III., and which, after much procrastination, met for business on Dec. 13, 1545, and continued, though with several interruptions, through 25 sessions, till 1563, under three successive pontiffs. It consisted of dignitaries of the church, representatives of the different universities, and of ambassadors from the princes and states attached to the communion of Rome. It was intended to revise, fix, and declare the doctrines of the church, to remove the abuses that had crept into its government, and the conduct of its functionaries,—

—‘succurrere lapsis

Legibus, et veros revocare in pristina mores;’

and, if possible, to restore peace and unity to the church. It may be said to have fully accomplished the first object, and, in some degree, also, the second; but, as might easily have been foreseen, it wholly failed in the third object, or in the attempt to smooth the differences and allay the violent struggles and animosities that then divided and agitated the Christian world. The constitution of the council, indeed, and the commanding influence which the papal legates early acquired over its deliberations, deprived it of all pretence to the character of an impartial tribunal, and fully justified the Protestants in repudiating its authority and rejecting its decrees. The latter were subscribed by 255 legates, cardinals, archbishops,

bishops, and other dignitaries, and have been generally admitted to contain, along with the creed of Pope Pius IV., a complete, authoritative, and well-digested synopsis of the principles and doctrines of the R. Catholic religion. The intrigues of which this council was the theatre have been developed with singular talent by Sarpi, in his famous ‘History of the Council of Trent.’ But as Sarpi was the implacable enemy of the court of Rome, and has dexterously endeavoured to show that its pretensions were almost always unfounded, and its advocates in the council almost always in the wrong, his conclusions are not always to be depended on. The history of Sarpi, though an able and ingenious, cannot be said to be an honest or trustworthy, work. Tiraboschi cautiously says of it, ‘*Io son ben lungi di sostenere, che gli si debba credere ciò ch’ ei racconta, solo perchè egli il racconta!*’ (Letteratura Italiana, viii. 131, ediz. Modena, 1793.)

TRENT, a river of England, being, next to the Thames and Severn, by far the most important stream in that part of the U. kingdom, not only on account of the length of its course, but of the fertile districts through which it passes, the immense number of canals with which it communicates, and the considerable rivers it receives in its progress. It has its source near the Cheshire border, in the moorlands of Staffordshire, about 4 m. N. from Burslem. At first its course is nearly SE., when it makes a sudden turn by the E. to the N. near Burton-on-Trent. It afterwards divides Leicestershire from Derbyshire; and pursuing a NE. course, by Nottingham to Newark, it turns more and more to the N. After dividing Nottinghamshire and Lincolnshire, and passing Gainsborough, it enters Lincolnshire at West Stockwith; and flowing N., with a little inclination to the E., unites with the great estuary of the Humber at a place called Trent Falls. It may be navigated by vessels of 200 tons as far as Gainsborough, and by barges as far as Burton-on-Trent, a distance of about 117 m., having in this lengthened course a fall to low water-mark of only 118 ft., or very near a foot per mile. From Burton-on-Trent to its source, the rise of the river is about 376 ft.; at least the summit level of the Caldon canal, which passes near the head of the Trent, is 494 ft. above the sea.

Of the subsidiary streams that fall into the Trent, the most considerable are the Blythe, Tarne, Dove, Derwent, and Soar; but of these it is only necessary to notice the last two. The Derwent rises in that part of Derbyshire called the High Peak; after passing Matlock, Cromford, and Derby, it has a circuitous course from the latter to Wilden Ferry, where it unites with the Trent. It is navigable as far as Derby about 13 m.; but it has been superseded, as a channel of communication, by the Derby canal. The Soar rises E. from Winckley, in Leicestershire, it flows through a rich grazing country, and more than half encompasses the ancient town of Leicester. After receiving the Wreke, its course is N., with a little inclination to the W., till, passing Loughborough, it falls into the Trent near Cavendish Bridge. It is navigable to near Loughborough, a distance of about 7 m.

The canals that communicate with the Trent are of the greatest importance: assisted by them, it affords an easy means of export for the manufactures of a large district of Lancashire; the salt of Cheshire; the produce of the Potteries of Staffordshire; the coal of Derbyshire; and the agricultural products of Nottinghamshire, Leicestershire, and Lincolnshire. It also opens a communication with the sea by way of Lincoln and

Boston; through which channels, as well as the Humber, the articles above enumerated are conveyed; and, in return, the interior of the country is supplied, either by Hull and Gainsborough, or Boston and Lincoln, with such commodities as are required by an immense population.

TRENTON, a town or city of the U. States, state New Jersey, of which it is the cap., though not the largest town, co. Hunterdon; on the Delaware, at the head of the sloop-navigation, 30 m. NE. Philadelphia. Pop. 17,220 in 1860, and 4,035 in 1840. The town is regularly laid out and well built; the state house, prison, various churches, the bank, and several cotton factories, are among the most conspicuous buildings. The river is here crossed, immediately below the falls, by a wooden bridge, 1,000 ft. in length. The Delaware and Raritan canal passes through the town; and Trenton communicates with New Brunswick by a railway 27 m. in length.

It is famous in the history of the American revolution for the victory gained over the British and Hessians, Dec. 26, 1776, by the troops under Washington, whose decision and intrepidity on the occasion materially promoted the progress of the Revolution.

TREVES (Ger. *Trier*), a city of Prussia, prov. Rhine, cap. of a reg. of the same name, on the Moselle, near its confluence with the Saar, and near the frontier of Luxembourg, 60 m. SW. Coblenz, on the railway from Coblenz to Luxembourg. Pop. 21,215 in 1861, exclus. of a garrison of 8,456 men. The streets of the city are broad and straight, and some of the public buildings imposing. Among the latter may be specified the cathedral, remarkable for its altars and marble gallery; the church of St. Simeon, of great antiquity; the elector's palace, now turned into barracks; the bridge over the Moselle, 690 ft. in length, the piers of which are supposed to have been built in the 28th year of the Christian era; the gate of Mars (*Porta Martis*) of colossal dimensions and great antiquity. Its ancient university was suppressed in 1794, but it has a college or seminary for the education of Catholic clergymen, a gymnasium, a collection of medals, and a public library, both of which belonged to the university; the latter comprises above 80,000 vols., many of which are scarce and valuable; it has also several hospitals, and a theatre. It is the seat of the government, has a prov. council, a tribunal of appeal for the prov., and a tribunal of commerce, with manufactures of linen, woollen, and cotton stuffs. Boats for the navigation of the Rhine are built here, and it has a considerable trade in Moselle wine.

Treves is, perhaps, the most ancient, and was long the most celebrated, of the German cities. A Roman colony was planted in it during the reign of Augustus, and thence it was called *Augusta Trevirorum*. From that period it became a place of great importance, and was reckoned one of the bulwarks of the empire on the side of Germany. Constantine the Great and several other emperors occasionally resided in Treves. Ammianus Marcellinus calls it *Domicilium principum clarum*. (Lib. xv. s. 27.) Ausonius, in his poem 'De Claris Urbibus,' celebrates its praises, and notices the extensive commerce it carried on by the Moselle. Besides the bridge and the *Porta Martis*, other remains of buildings that still exist, and many coins and relics found in the town and its vicinity, attest the power and splendour of its Roman masters. Beyond its walls are the ruins of an amphitheatre, cut in the side of a hill, where Constantine is said to have exposed some thousand slaves to be torn by wild beasts. Treves

was successively laid waste by the Huns, Goths, Vandals, and Franks, and as often rebuilt. It was for a lengthened period the cap. of the archbishopric or electorate of Cleves. Latterly the pop. has increased considerably; though there is little probability that it will ever recover its ancient fame and importance.

TREVISÒ (an. *Tarvisium*), a town of Austrian Italy, prov. Venice, cap. deleg. of its own name; on the Sile, 16 m. N. by W. Venice, on the railway from Venice to Trieste. Pop. 22,165 in 1857. The town is irregularly built, and surrounded by old walls. Most of the streets are wide and well paved, with colonnades in front of the houses; and there are numerous palazzi and religious structures. The old cathedral of St. Peter, a fine though unfinished structure, has in it a painting by Titian, and others by P. Bordone (a native of Treviso) and Domenichino. The Gothic church of S. Nicolo, the town-house, and theatre are good buildings; and in the monte di pietà is a fine picture by Giorgione. Treviso is a bishop's see, and has an episcopal seminary, gymnasium, public library, botanic garden, several hospitals, a castle, and theatre. The university, afterwards removed to Padua, was first established here. A large hardware factory, an extensive pottery, and manufactory of silk twist and stuffs, woollen cloths, paper, and cutlery, with some trade in corn, wine, cattle, and fruit, occupy most part of the inhabs. A large fair is held each year, from the 3rd to the 18th Oct.

This town appears to have been a Roman *municipium*. Under the Lombards, it was the cap. of one of the two marches or margraviates, which they established on the confines of their kingdom in Italy (Ancona having been the cap. of the other). Under the French it was the cap. of the dép. Tagliamento. Napoleon conferred the title of Duke of Treviso on Marshal Mortier.

TREVoux (an. *Trivæ*, or *Trivium*), a town of France, dép. Ain, cap. arrond., on the declivity of a hill, on the Saône, 13 m. N. Lyons, on the Paris Mediterranean railway. Pop. 2,794 in 1861. The town was formerly surrounded by walls and towers; and, on the summit of the hill on which it is built, are the ruins of its old castle, commanding a most extensive view over the surrounding plain. It has an antiquated appearance, with narrow streets, and mean-looking houses. Having been formerly the cap. of the principality of Dombes, and the seat of a parliament, it has still to boast of some considerable ancient edifices, including the hall in which the parliament meet, the hall of the courts of justice, a hospital founded by Anne Marie Louise d'Orleans, and a quay on the Saône. It has, also, a tribunal of original jurisdiction; a cloth manufactory; a royal establishment for the refining and assay of gold and silver; and some trade in the products of the surrounding country. It is very ancient. The emperor Severus defeated, anno 197, his competitor Albinus under its walls.

Trevoux has attained to distinction in literary history. Louis Auguste Bourbon, prince of Dombes, endeavoured to make it a sort of literary capital, and in this view he established, in 1695, a considerable printing-office in the town, in which he also intended to found a college. Not long after, in 1701, the well known and very learned monthly publication, entitled the 'Journal de Trevoux,' conducted by the Jesuits, began to issue from this press, where it continued to be printed till 1734, when it was transferred to Paris. Here also appeared, in 1704, the first edition of the 'Dictionnaire de Trevoux,' in 3 vols. folio. There were several subsequent editions of this

valuable work, most of which, however, were printed and published in Paris. Of these the last and best edition, in 1771, was so much enlarged as to comprise 8 vols. folio.

TRICALA, or TRIKHALI (an. *Tricca*), a town of European Turkey, cap. of the prov. of same name, identical with the an. Thessaly, on the E. side of a mountain ridge, 2 m. N. from the Selymbria (an. *Peneus*), and 37 m. W. by S. Larissa. Pop. estimated at from 10,000 to 12,000, chiefly Turks. It is of considerable extent; and the houses being intermixed with gardens and trees, it appears to be built in a wood, and the lofty minarets of its mosques rising above the trees give it a picturesque appearance. It has several Greek churches and synagogues. At the height of 10 or 12 ft. above the pavement, a wooden trellis-work, interwoven with vines, is carried over the streets, completely shading the passengers below. The shops are clean, and tolerably well furnished.

According to Strabo, this city had a magnificent temple of Æsculapius, but no traces of this edifice are now known to be extant. On a hill above the town are the ruins of a castle, apparently dating from the time of the Greek emperors, and commanding a fine view over the plains of Thessaly. These are depastured by numerous flocks of sheep, and also produce a good deal of cotton, the manufacture of blankets, coarse woollens, and cotton stuffs occupying many of the inhabs. of Tricala. Its trade is also pretty extensive, from its being on the principal road from Yanina to Constantinople, and commanding the only pass by which supplies of corn and other provisions are brought from Thessaly into Albania. The latter circumstance renders it important as a military post.

TRICHINOPOLY, a distr. of British India, presid. Madras, chiefly between lat. $10^{\circ} 30'$ and $11^{\circ} 30'$ N., and long. $78^{\circ} 10'$ and $79^{\circ} 30'$ E., having N. Salem and S. Arcot, E. Tanjore, S. the latter and Madura, and W. Salem and Coimbatore. Area, 3,169 sq. m. Pop. estim. at 580,000. The Caverry runs from W. to E. through the country, irrigating a considerable extent of rice land. In addition to rice, sugar-cane, with tobacco and betel-leaf, are grown in the tracts watered by tanks and wells; in the dry lands the other usual products of the Carnatic are extensively cultivated, and there is good pasturage for sheep and cattle, which are numerous. The principal imports are glue, oil, tobacco, pepper, and areca nut, while the exports comprise cloth, indigo, saltpetre and cotton. The principal manufactures are cloth, for domestic use, and indigo, with some subsidiary articles made in the town of Trichinopoly.

TRICHINOPOLY, a large fortified town of British India, presid. Madras, cap. of the above distr., on the Caverry, 186 m. SW. Madras, on the railway from Madras to Tanjore. Pop., exclusive of troops, estimated at 74,000. It is of an oblong form, nearly 1 m. in length, N. to S., by about $\frac{1}{2}$ m. in breadth. Exclusive of some outworks, it is surrounded by a double wall and ditch, with a covert way and glacis. But its defences are now mostly in a ruinous state, except the citadel near its N. extremity, which, being situated on an elevated rock, commands any military operations carried on in any part of the vicinity. On this rock also stands a large and massive pagoda, and a pillared square building, with a statue of Hannuman, occupies the highest peak, while in the S. face of the rock is a small sculptured excavation in the style of some of the cave temples at Ellora. The jewellery made at Trichinopoly had

are still in request. Cotton cloths, table linen, and harness are made here, and the town is an emporium for a great variety of manufactures. It is well adapted for a military station, as, besides being well supplied with different kinds of merchandise and artisans, it has a station on an important line of railway, and the ordinary roads of the district are so good as to admit, at every season, of easy communication with Madras, Vellore, and Mysore. Hence also diverge all the great roads leading to Tanjore, Madura, and Dindigul, the three chief stations in the S. part of India.

TRIESTE (an. *Tergeste*), a town and principal sea-port of the Austrian empire, cap. gov. and circ. of its own name, prov. Illyria, on the Adriatic, near its NE. extremity, 73 m. E. by N. Venice, on the railway from Vienna to Venice. Pop. 64,096 in 1857. Trieste is divided into the old town, the new town, or Theresienstadt, the Josephstadt, and the Franzenvorstadt, or Francis' suburb. The old town stands at the foot and on the declivity of a steep hill crowned by the citadel; it has dark, narrow, winding, and frequently steep streets, with gloomy-looking houses, and is surrounded by the remains of ancient fortifications. The new town, immediately NW. of the former, and built on level ground, partly taken from the sea, consists, on the contrary, of handsome streets, crossing each other at right angles, and lined with neat buildings. It is partially intersected by the canal cut by Maria Theresa, by means of which vessels drawing 9 or 10 ft. water may load and unload at the doors of the warehouses. Between the new and old towns runs the Corso, the principal thoroughfare, broad but winding, furnished with good shops and coffee-houses, and opening successively into spacious and handsome squares. The principal of these is the Piazza Grande, with a fine public fountain, and the column and statue of the emperor Charles VI., to whom Trieste is principally indebted for its importance in modern times. In this square the great vegetable and fruit market is held, and on one side of it is the *locanda-grande*, or principal hotel, commanding a fine view of the harbour. The exchange, the finest building in the city, stands in another square, in which is a statue of Leopold I. Continual improvements are taking place in and around Trieste; many new streets and promenades have been laid out, and public walks planted with trees; new moles, and a gigantic hospital, the cost of erecting which has been estimated at 800,000 florins, have also been constructed.

The cathedral, in the old town, is supposed to occupy the site of a temple of Jupiter. It is in the Byzantine style; its interior, like St. Mark's at Venice, is ornamented with mosaics, and many Roman inscriptions and carvings are built up in the walls. It contains the monument of Winkelmann the antiquary, assassinated here in 1768. There are five other Rom. Catholic, two Protestant, and two Greek churches, a synagogue, and an English chapel. The finest of these edifices are the Greek churches, particularly that at the head of the great canal, with a magnificent marble altar. The church of the Jesuits merits attention by its architecture and fine paintings, and the palace of the governor is also an imposing structure. One of the handsomest private residences is the house formerly belonging to a Greek merchant of the name of Carciotti, who, having begun business in Trieste as a pedler, died worth 1,000,000*l.* sterling. The castle formerly constituted the main protection of the town and harbour, and is still maintained in a tolerable state of defence. The great theatre is spacious, and there

worthy of notice are the barracks, post-house, dockyard, lazarettos, one of which is among the most perfect establishments of its kind, and the terrace of the casino ornamented with several statues.

Trieste is in the S. what Hamburg is in the N., the great commercial entrepôt of Germany. A harbour, which, though rather limited in size, is easy of access and convenient, has been formed by the Theresian Mole, founded on a ledge of sunken rock, and projecting NW. into the sea from the S. extremity of the old town. At its termination has been formed an irregular platform about 1,100 ft. in circ., on which have been erected a fortress and lighthouse, with an intermittent light 106 ft. above the sea. Another lighthouse, having the lantern 103 ft. above the sea, has been erected on the point of Salvore, about 18 m. W. by S. Trieste. The port, with the Mole, forms a crescent $1\frac{1}{2}$ m. in length, being a continued quay, faced with hewn stones, and with stairs and jetties for the convenience of embarkation. On the N. side of the port is a dock or harbour, appropriated exclusively for vessels performing quarantine. It is walled round, and furnished with hotels, warehouses, and every sort of accommodation for passengers and goods. Ships under 300 tons burden lie close to the quays, those of greater size mooring in the roads in front of the city. The principal defects of the port are its limited size, and its being exposed to NW. winds, which sometimes throw in a heavy sea. The gales, however, are seldom of long continuance; and the holding ground being good, when proper precautions are taken, no accident occurs. Trieste being a free port, goods destined for its consumption, and that of the adjoining territory, pay no duties; but such as are taken into the interior for consumption pay, of course, the duties in the Austrian tariff. The transit duties and shipping charges are extremely reasonable.

The exports are various, consisting partly of the raw and partly of the manufactured products of Austria Proper, Illyria, Dalmatia, Hungary, and Italy; with foreign articles imported and warehoused. Among the principal articles of raw produce may be specified, corn, chiefly wheat and maize, with rice, wine, oil, shumac, tobacco, wax, silks, silk rags and waste, hemp, wool, flax, linen rags, hides, furs, and skins; the produce of the mines makes an important item, consisting of quicksilver, cinnabar, iron, lead, copper, brass, litharge, alum, and vitriol; the forests of Carniola furnish timber, for ship-building and other purposes, of excellent quality, and in great abundance, with staves, cork wood, box, and hoops; marble also ranks under this head. Of manufactured articles, the most important are, thrown silk, silk stuffs, printed cottons from Austria and Switzerland, coarse and fine linens, and all sorts of leather. Under this head are also ranked soap, Venetian treacle, liqueurs, with jewellery, tools, and utensils of all sorts, glass ware, and mirrors, Venetian beads, refined sugar, and a host of other articles. Trieste is also a considerable depôt for produce from the Black Sea, Turkey, and Egypt. The principal articles of importation consist of sugar, coffee, dye-stuffs, cotton-wool from the Levant and the U. States, cotton goods and cotton yarn, silks, oil, tin plates, salted fish, and a host of other articles. The value of the imports always exceeds that of the exports, occasioned in part by their being subsequently transhipped to other ports, and partly by their being an excess of exports as compared with imports from other parts of the empire.

Trieste has a larger amount of shipping than

port 10,378 vessels, of 735,860 tons burthen, in 1861; 10,905 vessels, of 769,352 tons, in 1862; and 10,578 vessels, of 725,574 tons, in 1863. The great steamship company, known as the 'Austrian Lloyd,' has its chief seat at Trieste, in an immense edifice, called the Lloyd arsenal, constructed 1852-56, and including wet and dry docks, and building slips for the largest steamers. The company maintains regular steam communication between Greece, Turkey, and Egypt, and in its hands is a large part of the commerce of Trieste.

Trieste is the seat of the administration for its gov. and the Illyrian coast, of courts for the town and circle, a tribunal of commerce, the central board of health for the empire, and a board of police, and is a bishop's see. It has an imperial academy, a school of navigation, normal, female, Jewish, Greek, and elementary schools, many charitable institutions and learned societies, and several periodical publications. There are no public banks, but several private establishments of undoubted solidity, and various insurance offices. Trieste has manufactures of rosoglio, wax-lights, leather, soap, playing cards, musical instruments, with dyeing-houses, sugar refineries, potteries, and distilleries. It is better supplied with provisions, chiefly from Dalmatia and the country round Venice. A mixture of all nations is met with here, and all the principal merchants and traders are foreigners. German is spoken by the authorities and in the public offices, but Italian is the prevailing language of the middle classes, while the lower speak a Slavonic dialect.

Traces of an amphitheatre and other Roman remains exist at Trieste. During the middle ages it was the cap. of a small republic; but its history presents little remarkable till 1719, when Charles VI. made it a free port.

TRIM, an inland town of Ireland, prov. Leinster, co. Meath, of which it is the cap., on the Boyne, here crossed by a bridge, 25 m. NW. by W. Dublin. Pop. 2,057 in 1861. Trim is a very old town, having been given by Henry II., as part of the palatinate of Meath, to Hugh de Lacy. The latter constructed the castle, which, from its extent, strength, and elevated situation on the banks of the river, was at once the largest and most important of the numerous fortifications erected by the English within the limits of the Pale. The ruins sufficiently attest its ancient grandeur. On the other side of the river are the ruins of St. Mary's Abbey, an ancient and extensive edifice; and there are some other ecclesiastical remains. The town had, also, been surrounded by walls, considerable portions of which are still entire. Indeed it was anciently the occasional seat of the lords-lieutenant, and several parliaments have been held within its walls. It was taken, without opposition, by Cromwell, in 1649. At present, however, notwithstanding it is the co. town, Trim is of little importance. Its principal public building is the new co. gaol, an extensive structure on the radiating plan. It has, also, an ancient parish church, a Rom. Cath. chapel, a dispensary, an infantry barrack, with a co. infirmary. It returned 2 mems. to the Irish H. of C. till the union, when it was disfranchised, and since then it has continued to decline. The assizes for the co. are held here, and general sessions twice a year, and petty sessions on alternate Saturdays. It is a constabulary station, and has a flour-mill, a brewery, and a tannery. Markets on Saturdays: fairs, March 27, May 8, Wednesday after Trinity Sunday, Oct. 1, and Nov. 16.

About 3. m. S. from the town, on the road leading to Summerhill, is Dangan, formerly the

as the birthplace of the Duke of Wellington. The house in which the great general first saw the light has, however, been wholly pulled down; but a handsome pillar, surmounted by a statue of the 'iron duke,' has been erected in the town.

TRINCOMALEE, a marit. town of Ceylon, on its NE. coast, near the entrance to one of the finest bays in the world, about 150 m. NE. Colombo; lat. $8^{\circ} 32' N.$, long. $81^{\circ} 87' E.$ The town, which is but inconsiderable, is built at the foot of a rock, on which is the fort, on the outside of a narrow peninsula or tongue of land bounding the harbour on the E. It has but few European inhabs., and, what is remarkable, few Singalese; the lower classes being principally Malabar R. Catholics. The fortifications form a sweep of above 1 m. in length along the shore. Fort Frederick is a station for four companies of a European regiment, a company of royal engineers and artillery, and detachments of the Ceylon rifle corps. Fort Osterberg, on the termination of a ridge of hills, about 3 m. SW. Trincomalee, commands the entrance of the harbour, and the dockyard close beneath. It forms the head-quarters of a detachment of artillery and a European company. The fortifications here were mostly constructed by the Portuguese; the Dutch did little or nothing for the improvement of the place while in their possession.

The harbour of Trincomalee was styled by Nelson 'the finest harbour in the world.' It is almost landlocked, and the water is so deep that it is all but practicable in many places to step from the shore on board large vessels moored alongside. During the NE. monsoon, when all the ships on the Coromandel coast and in the Bay of Bengal are obliged to put to sea, Trincomalee is their principal place of refuge, and a vessel from Madras can reach it in two days. The town, which may be considered as the military cap. of Ceylon, surrendered to the English in 1795.

TRING, a market town and par. of England, co. Hertford, hund. Dacorum, on the London and North Western railway, and on the road from London to Aylesbury, 30 m. NW. London. Area of par. 7,390 acres. Pop. 4,841 in 1861. The town consists principally of two streets; it is tolerably well built, the houses being mostly modern. The church is an embattled structure, with a massive tower and low spire at the W. end. The living, a perpet. curacy, worth 157*l.* a year, is in the gift of the dean and chapter of Oxford. There are meeting-houses for Baptists and Independents, and a Lancastrian school. The inhabs. are principally employed in the manufacture of straw plait, canvas, and a few silk fabrics. Markets on Fridays; fairs, Easter Monday and Oct. 11. Tring Park, in the vicinity, was built in the reign of Charles II.

TRINIDAD, an island of the W. Indies, or Antilles, being the most southerly of the group called the Windward Islands, and, next to Jamaica, the largest and most valuable of the islands belonging to Great Britain in this part of the world. It lies immediately off the NE. coast of Colombia and the N. mouths of the Orinoco, between the 10th and 11th degs. of N. lat., and the 61st and 62d of W. long., its NW. extremity being only about 13 m. from Punta de la Pena, the extremity of the peninsula of Paria, and its SW. cape being but 7 m. from the delta of the Orinoco. On the W. Trinidad bounds the Gulf of Paria, and on all other sides it is surrounded by the Atlantic. It is of a square or oblong form, with considerable projections at all its angles except the SE. Length, N. to S., 50 m.; average breadth (exclusive of its projections), about 33 m. Area estimated at 1,300,000 acres, or about 2,000 sq. m. The popu-

lation of the island, in 1861, amounted to 84,438: 46,074 males, and 38,364 females, of the following classification: Trinidad, 46,936; British colonies, 11,716; United Kingdom, 1,040; Foreign, 4,301; China, 461; India, 13,488; Africa, 6,035; non-described, 461.

The mountain chains run from W. to E., and may be regarded as continuations of the chains on the opposite coast of Venezuela, from which this island has most probably been detached by some convulsion of nature. Along the N. shore a bold range of mountains rises to the height of 3,000 ft., broken into the most rugged and abrupt forms, and clothed to the summit with forest trees. Towards the S. extends a chain of hills of less elevation, and of a more pastoral character; while the centre of the island is occupied by a group of flat or round-topped hills, dividing it, as it were, into two extensive valleys, which are occasionally intersected by a succession of hill and dale. The whole island is well watered by numerous streams in every direction. The principal are on the W. coast: the Caroni, navigable for 6 leag. from its mouth; and on the E. the Oropuche and Nariva, which last is said to be navigable for vessels of 250 tons to a league from its source. The N. and E. coasts are not well furnished with harbours, which is unfortunate, as the winds blow from those quarters for three-fourths of the year. But the W. coast has numerous bays and inlets, and the Gulf of Paria is an extensive inland sea, in which ships of all sizes may ride securely, and anchor anywhere without the smallest risk, and in any convenient depth of water.

The greater part of the interior of this island is uncultivated. The low grounds are in parts marshy, while the more elevated portions are, for the most part, covered with a dense vegetation of forest and underwood. The soil is, in general, deep, stiff, and tenacious; and, if properly cultivated, could alone supply sugar adequate for the consumption of England. It might be supposed that, in an island so extensive, mountainous, and covered with forests, the atmosphere would be generally overloaded with moisture. It does not, however, appear that the fall of rain is as great as in Guiana, the average being about 65 in. a year, and this is said to diminish with the progress of cultivation. The dry season commences in Dec., and ends in May; but it is a peculiar advantage of this island, that it is exempted from those destructive droughts common to all the other W. India islands from Barbadoes to Cuba. During June and July showers are frequent, and in Aug., Sept., and Oct. the rain falls in torrents, often accompanied by violent storms. The weather generally moderates, and the rains become more slight towards the end of Oct., and there is seldom any fall after the beginning of Dec. The nights are generally cool and pleasant.

It has been estimated that only about 1-30th part of the surface of this island is incapable of cultivation. The settled portions of Trinidad are mostly confined to the NW. and a few places along the SW. coast. Of the cultivated land, 32,000 acres are under the sugar cane, being divided into above 180 estates, the capital invested in which is estimated at 2,200,000*l.* sterling. The rest of the cultivated lands are occupied by cocoa and coffee plantations, and provision and pasture grounds.

This island, like the other W. Indian colonies, has suffered greatly since the emancipation of the slaves from a want of labour; for, from the abundance of the land and its fertility, it might, were labour to be had on reasonable terms, make a rapid progress. To obviate its deficiency, coolies have

been imported from India, and immigration from India and China is fully encouraged by the government. The amount voted in aid of that object in 1863 was 32,890*l*. By the census of 1861 there were 13,488 coolies, and 461 Chinese. Since then there have been imported, in 1862, 1,967 coolies, and 452 Chinese; and, in 1863, 1798 coolies, giving a total of 17,253 coolies and 913 Chinese. These immigrants (coolies and Chinese) are located on 154 different estates. The largest number on any one estate, in 1864, was 206, the 'Orange Grove Estate,' county of St. George. The revenue collected on account of the annual outlay was, in 1863, 16,137*l*. sterling.

Cocoa is more extensively grown in Trinidad than in any of the other British Antilles, and is of superior quality. The cocoa-tree somewhat resembles the cherry-tree, and grows to about 15 ft. in height. It flourishes most in the new soil on the banks of rivers, delighting in shade, to procure which plantain or coral-bean trees (*mudre del cacao*) are planted between every other row. The cocoa seeds are placed in small mounds, two seeds being sown together, and the weakest plant of the two afterwards destroyed; the survivor is transplanted after attaining 15 or 18 inches in height. Until the age of 5 years, all the flowers are destroyed as they appear. The fruit grows in a pod, which, as it ripens, changes to a bluish red or lemon colour. The crop is gathered throughout the year, but principally in June and Dec. The ripe pods are broken or cut open, and the seeds extracted with a wooden spatula. They are afterwards spread out to dry in the sun on rush mats. When quite dry and hard, the nuts are lightly packed in boxes or bags, and kept dry for exportation. Coffee, indigo, tobacco, and cotton come to perfection, though mostly grown only in small quantities. Here also are all the fruits and vegetables of the adjacent tropical climates, and the vines transplanted from France or Spain are said to equal their parent stocks. The mountains, like those of the adjacent continent, consist chiefly of argillaceous and micaceous schist; milky quartz, ferruginous sand, pyrites, arsenic, alum, sulph. copper, plumbago, and sulphur are found; but the most abundant mineral is asphaltum, which may be supplied in any quantity. It is found in the greatest profusion in the lake Brea, or pitch lake, an area of about 150 acres in the NW. side of the island, about 30 m. S. from Port Spain, and about 80 ft. above the level of the sea. Though called a lake or lagoon, this depôt of pitch is for the most part quite solid, rent, however, by chasms, varying from 3 to 30 feet in width, but of no great depth, so that they are traversed without much difficulty. Here and there, wherever there is any soil, are clumps of stunted trees. The liquid part of the lake, on the side nearest the sea, is supposed to be about 3 acres in extent, and consists of fluid pitch of unknown depth, in a state of slow ebullition, and exhaling a strong bituminous and sulphurous odour. This vast pitchy cauldron must be approached with extreme caution. It has been attempted to apply the asphaltum brought from this lagoon to the same purposes as pitch and tar, but it is found to require so large an admixture of oil that it becomes too expensive. If it could be economically applied, Trinidad might furnish abundant supplies for the whole world.

Exclusive of the pitch lake, Trinidad has several extinct volcanic craters, active mud volcanoes, and other evidences of volcanic agency. Slight shocks of earthquakes have also been occasionally felt, but happily the island appears to be exempted from the scourge of hurricanes.

Trinidad was greatly neglected by the Spa-

niards, and previously to 1783, when emigration to it was first actively promoted by them, no more cocoa, indigo, and other products were exported than sufficed to freight a small schooner two or three times a year to St. Eustatius. Since then the progress of cultivation has been comparatively rapid. The subjoined statement gives the total value of the imports and exports of Trinidad in each of the years 1856-63:—

| Years | Imports | Exports |
|-------|---------|-----------|
| | £ | £ |
| 1856 | 666,474 | 574,767 |
| 1857 | 800,820 | 1,073,878 |
| 1858 | 825,969 | 785,863 |
| 1859 | 734,902 | 820,606 |
| 1860 | 829,304 | 714,603 |
| 1861 | 856,726 | 645,561 |
| 1862 | 733,598 | 739,507 |
| 1863 | 710,792 | 796,497 |

The public revenue amounted to 184,377*l*. in 1863, and the expenditure to 188,981*l*.

Trinidad, like St. Lucia and British Guiana, is governed by a governor and council, acting under the orders of the home government. The legislative council of the island consists of 12 mems., 6 of whom are styled official, holding high offices, and 6 non-official, being selected from among the inhabs.; all are removable at the pleasure of the crown. The laws of the island are a mixture of those of Spain and England. The office of coroner does not exist here, nor trial by jury in the supreme criminal court. Every person about to leave the island must first give public notice of his intention, and obtain a pass from the governor.

The settled part of Trinidad is divided into 11 districts. The cap. and seat of government, Port Spain, which, in 1861, had 18,980 inhabs., is situated on the W. coast of the island, near the mouth of the river Caroni. It is one of the handsomest towns in the West Indies, being built wholly of stone or brick, with wide and well kept streets, some of which are shaded with rows of noble trees. It has Protestant and Roman Catholic churches, a Presbyterian secession church, and a Methodist chapel. The stores and magazines are crowded with valuable merchandise, which, however, is partly destined for the supply of Colombia. In the vicinity of the town are Fort George, now nearly dismantled, and St. James's barracks. The latter are said, in the 'Trinidad Almanac,' 'to be placed, on account of an infamous job, in one of the most pestilential spots in the island.' The harbour is good, and, as already stated, the entire Gulf of Paria may be regarded as a magnificent harbour. Numerous public and private schools are established in Trinidad, and are well attended. The regular military force amounts to about 500 men, including officers.

Trinidad was discovered by Columbus in 1498, and was taken possession of by the Spaniards in 1588, an event followed by the almost total extermination of the Indians. Raleigh visited it in 1595. The French took it in 1696, but soon afterwards restored it to the Spaniards, who held it till taken by the English under Abercrombie in 1797.

TRIPOLI, the most easterly of the Barbary states, the dominions of which, exclusive of Tripoli Proper, comprise Barca and Fezzan, noticed in other parts of this work. Tripoli Proper lies between lat. 29° and 33° N., and long. 10° and 20° E.; having E. Barca, W. Tunis, S. Fezzan and the Desert, and N. the Mediterranean. It stretches along the North African coast about

800 m. E. and W. Its breadth inland varies greatly, owing to the frequent interruption of the desert; but its area has been estimated at nearly 100,000 sq. m., and its pop. at from $1\frac{1}{2}$ to 2 millions, principally Moors and Berbers, with some Turks, Negroes, Jews, and Christians.

In antiquity, Tripoli Proper was called the *Regio Syrtica*, from its lying between the *Syrtis Major*, now the Gulf of Sidra, on the E., and the *Syrtis Minor*, now the Gulf of Gabes, on the W. The former, or *Syrtis Major*, is a very extensive bay, extending from Bengazy on the E. to Cape Mesurata on the W. about 280 m., having where greatest a breadth of 150 m. This gulf was reckoned in antiquity, next to the strait of Scylla and Charybdis, by far the most dangerous part of the Mediterranean, principally on account of the shallowness of its waters, which were said to be encumbered with quicksands, and partly also from the irregular action of its tides. '*Verum importunos atque atrox, et ob vadorum frequentium brevia, magisque etiam ob alternos motus pelagi affluentia et refluxus infestus.*' (Pomp. Mela, lib. i. cap. 7.) The dangers of the Syrtis have also been frequently alluded to by the poets, who have given it the epithet of inhospitable:—

————— '*per inhospita Syrtis*
Litora, per calidas Libyæ sitientis arenas.'
Lucan, lib. i. v. 367.

See also Virgil, *Æneid*, i. v. 110; Horace, *Odes*, i. 22, &c.

But though the navigation of the greater and lesser Syrtis, especially the former, be not free from danger, this has been greatly exaggerated by the ancients. During strong N. gales a very heavy sea is certainly thrown into the gulf, and the S. shore being low and sandy, a considerable portion of it is submerged, and the waters of the entire gulf have an extremely agitated and turbid appearance, but in ordinary weather it may be navigated by middling-sized vessels with little or no difficulty. 'The Gulf of Sidra,' says Captain Smyth, 'has few or no dangers, excepting little heads of rocks scattered about different points, and the tides are insignificant. With the hand-lead going, a vessel may approach all parts; but of what utility can it be to enter here, there being but one place in the whole gulf worthy to be called a port? We could find anchorage for small vessels only at Bushaifa and Braiga, at the bottom of the gulf; and Gharra Island, Karhora, and Bengazy on the E. coast.' But it is obvious from this statement, and from the want of harbours and roadsteads, that when the vessels of the ancients, who had comparatively little skill in navigation, got embayed in this gulf during the prevalence of northerly gales, they must have been in an exceedingly perilous situation, and we need not therefore be surprised at the exaggerated terms in which they have described its terrors.

The coast-lands, except at the bottom of the Gulf of Sidra, where the desert and sea are continuous, are here, as in the rest of N. Africa, extremely fertile. These, however, seem to be the only valuable portions of the surface. The Atlas ranges approach nearer the sea here than in most other parts of Barbary, and immediately beyond them the country is a sandy arid desert. Tripoli has no river of any consequence, though a number of small rivulets descend from the mountains to the sea. Neither are there any lakes in the country, which, accordingly, depends for its irrigation and consequent fertility almost solely upon the rains. These, when they occur, fall incessantly for several days and nights; they

then cease suddenly, and not a drop more descends for several months together. The most severe famines are sometimes experienced from a continuance of drought; but when this is not the case, the country appears to have lost none of its ancient productiveness. According to a French traveller, M. Blaquiere, 'A more luxuriant tract than that in the immediate neighbourhood of the capital cannot be imagined. Country-houses, extensive pleasure-gardens, groves of orange-trees, and innumerable fountains, together with the incessant progress of vegetation, form an assemblage of rural beauty here which is rarely to be met with. The fairy scene does not, however, reach more than 5 m. inland, when nothing but an immeasurable waste of sand is presented to the eye, and forms a striking contrast with the cultivated fields, to the edges of which it approaches. It should be observed, that a want of industry, and of proper encouragement from the government, are the only reasons why cultivation is not extended beyond its present limits. There is probably no country so highly favoured by nature as this is with respect to a rapid succession of the crops. The rains generally begin after gathering the dates, towards October, in the beginning of which month the Arabs plough and sow their grounds. In December and January the weather becomes dry and extremely pleasant, like our spring in England. In the beginning of April, the market before Tripoli is abundantly stocked with cattle, poultry, and vegetables of every kind. Towards June, almonds, figs, apples, pears, plums, peaches, nectarines, grapes, and melons are in season, and incredibly abundant. Cotton has been cultivated very successfully by various individuals; but, owing to a want of encouragement, does not form an article of export. Formerly, a quantity of raw silk formed one of the exports; but its cultivation has latterly been neglected. Mulberry-trees are, however, to be found near the capital in great numbers, so that silk may at any time become again a staple commodity of the country. The castor-tree (*Ricinus Palma Christi*) is found in the vicinity of Tanjoura, where a great deal of that oil is made annually, though it has not hitherto been exported in any great quantity.' The exportation of corn, which otherwise would be very considerable, is prohibited except when carried on by the pacha for his exclusive benefit. Tobacco, saffron, madder, &c. are grown in small quantities; senna and galls are produced in the mountains, and the cassab and lotus are indigenous. But dates constitute the principal food of the inhabs. The dates of Tripoli are finer than those of any other part of Barbary, and, besides its fruit, the date-tree yields a juice called *laghibi*, which, when drunk fresh, is a very agreeable beverage, and, when suffered to ferment, forms an intoxicating fluid, in great request among the Mohammedans, notwithstanding the prohibitions of the Koran.

Each village is usually surrounded by plantations of date and olive trees, the surplus produce of which, with the straw mats and earthen jars made by the villagers, are partly exported, but are mostly disposed of to Bedouin traders. The vines along the coast yield grapes and raisins of the finest quality, and might be made to produce excellent wine. According to Della Cella, the neglect of such an advantage is less owing to the denunciations of the Prophet than the exceeding sloth and ignorance of the people. Cattle, sheep, and poultry are reared in large numbers in some places, and, as animal food is little consumed, they are principal objects of exportation. During the war, Malta drew large supplies of cattle and

other live stock from Tripoli, and still imports most part of the cattle sent out of the country. Beef, though small, is very good, as is lamb: mutton is of inferior quality. A kind of wild cattle, the wild hog, antelopes, bustards, and several other wild animals useful to man, are met with in abundance. Large beds of rock salt exist in different parts of the country. On the coast, fish of every kind are most abundant; but, with the exception of a few boats employed from the capital, fishing does not form a part of public industry.

The natives of this regency manufacture carpets, bournouses, haiks, and other woollen fabrics, camlets, mats of palm leaves, goats' hair sacks, Morocco leather of different kinds, earthenware, prepared skins, and a few other articles. The manufacture of potash, like the exportation of salt, is a monopoly of the bey. The principal trade consists in the barter of European produce for those of the interior of Africa. From Tripoli caravans go to Mourzouk, where a large fair is held in December and January, and to which the products of Bornou, Sockatoo, Houssa, Timbuctoo, &c. are brought. (See art. FEZZAN.) The Fezzan merchants proceed in February and March to Tripoli, where they receive their goods for the S. upon credit, paying by exchange one year for the goods purchased in the preceding. They bring from the interior annually about 1,500 negro slaves, 10,000 *metacali* (small parcels, each worth a Venetian sequin), of gold dust, 700 cwt. of natron, and 1,600 quintals of senna leaves. The articles they take back are swords, pistols, mock pearls, brass, tin, coral, writing paper, and cotton stuffs, and these articles, with provisions, colonial produce, timber pitch, spirits, cochineal, indigo, damask, and other silk fabrics, spirits, looking-glasses and toys, constitute the principal imports from Europe. The exports from Tripoli by sea are wool of excellent quality, mantles, and other articles of dress, oil, senna, and other drugs, madder, barilla, hides, goat and sheep skins dressed, dates and other fruits, cattle, ostrich feathers, iron, gold dust and saffron.

The government is in the hands of a bey or pacha, who rules with despotic sway, and is chosen from among the Turkish officers resident in Tripoli, being confirmed in his authority by a firman from the Turkish sultan. He presides in the divan, and is assisted in his various duties by a bey-commander-in-chief; an aga commanding the Turkish soldiers; the *kaya*, or grand judge, who dispenses justice daily at the castle gate of the capital; the chief officers of the treasury and household; the *sheik-el-bled*, or head police magistrate; the *mufti*, or head of the priesthood; and the *cadi*, or judge in matters respecting the Mohammedan faith. The district governors seem to have powers equivalent to the bey in their own districts; thus, the aga of Mesurata, besides his military attributes, unites in his own person all the judicial and legislative powers of the state. The revenues of the bey are derived from the tribute of the district governors, and the Arab tribes in the interior, taxes on the Jews and merchants, a tax of 10 per cent. on all land-produce, import and export duties, monopolies, presents, and exactions, fines for the mitigation of punishment, and confiscations, their amount being estimated at from 25,000*l.* to 26,000*l.* sterling a year; in addition to which a large portion of the necessities for his use are procured by extortion from his subjects. His standing army is said to amount to 3,000 men; but in time of war an army of 10,000 irregular cavalry and 40,000 foot may be raised by levies from the Arab tribes.

The character of the natives of Tripoli appears to be very indifferent. A recent British traveller asserts that drunkenness is more common than in most towns in England. There are public wine-houses, at the doors of which the Moors sit and drink without any scruple, and the greater part of the better sort of people also are great drinkers. M. Blaquiere, the French traveller before cited, says he was unable to discover any good qualities to be contrasted with the attributes of revenge, avarice, treachery, and deceit, which predominate alike in the prince and the peasant. And yet such is the promptitude with which justice is administered, that crimes in Tripoli are less frequent than in European countries, and the people are more civilised than in most parts of Barbary. Intolerance towards Christians was formerly very strongly marked; but foreigners are now treated with respect, piracy and Christian slavery having been wholly abolished.

This territory contains some Roman antiquities, but they are much less frequent than in the adjacent territory of Barca. In the middle ages it generally shared in the fortunes of the rest of this portion of Africa. In 1522 Tripoli was given by the emperor Charles V., who had become possessed of some authority over it, to the knights of Rhodes; but these were driven from it by the Turks in 1551. Fezzan was rendered tributary about 1714; but the authority of the pacha, over either that country or Barca, appears to be little more than nominal, or at any rate very much disturbed.

TRIPOLI (an. *Θα*), a maritime city of N. Africa, cap. of the above regency, on a low rocky tongue of land, projecting into the Mediterranean; the castle being in lat. 32° 53' 56" N., long. 13° 10' 58" E. Pop. estimated at 25,000, of whom about 2,000 are Jews, residing in a suburb of their own. The town is much smaller than either Algiers or Tunis; it may be $\frac{3}{4}$ m. in length, by $\frac{1}{2}$ furlongs in breadth; but its shape is very irregular. It is encompassed by high and thick walls, the original stone-work of which appears to have been very good; but they have been patched up in all directions with mud and fragments. A good many cannon are mounted on the ramparts, and Tripoli has some degree of strength as a fortress; it is entered by two gates, one to the E. and the other to the S. Viewed from the sea, the town appears to be semicircular; and the extreme whiteness of the square flat buildings, covered with lime, which in this climate encounters the sun's fiercest rays, is very striking. The baths form clusters of large cupolas, to the number of 8 or 10, crowded together in different parts of the town. The mosques are in general surrounded by plantations of Indian figs and date-trees, which, at a distance, give the whole city a novel and pleasing aspect. Internally, however, it has narrow and irregular streets, and mean houses. The pacha's castle is at the E. end, within the walls, with a dockyard adjoining. It is very ancient, and inclosed by a high strong wall; and the numerous buildings which have been added at different periods to its interior, to receive the junior branches of the royal family, have both deprived it of all symmetry, and increased it to a little irregular town. Tripoli is, in most respects, inferior to the capitals of the other Barbary regencies. However, in point of tranquillity and cleanliness, Tripoli might be taken as a model by some European towns in the Mediterranean. Though it possess neither the elegance nor the regularity of Valetta, there are few acts of violence committed in the streets, and robberies are altogether unknown. Independent of a nightly patrol, there is a guard stationed in each street, who is

responsible for whatever may occur in it. There is, besides, always a number of persons kept for the express purpose of sweeping the town. The caravanserais, mosques, and houses of the different consuls and higher classes, are usually built of stone, and regularly whitewashed twice a year; the dwellings of the lower orders are of earth, small stones, and mortar. Tripoli has 6 mosques of the first rank, with minarets, and ■ smaller ones. The great mosque has a roof composed of small cupolas, supported by 16 elegant Doric columns of fine grey marble. There are 3 synagogues, one or two places of worship for Christians, several market-places, cafés, and European hotels. E. of the town, on ■ tract of rocky and elevated ground, is the site of the ancient cemetery, where several remains of antiquity have been discovered, and some portions of Roman tessellated pavements, fragments of columns, and entablatures, built up in modern walls, are met with in the city. The most striking relic of antiquity, however, is a magnificent triumphal arch, near the marine gate, at present used as a storhouse. Though half sunk in sand, its upper part is still in good preservation; and an inscription shows that it had been erected in 164, in honour of the emperors Aurelius Antoninus and L. Verus. It is built of huge blocks of marble, without cement, and has been ornamented with warlike trophies and other carvings in relief. The ceiling also is beautifully sculptured.

The harbour of Tripoli, though not very spacious, is safe, and capable of accommodating a large fleet of merchant ships. Small frigates, whose draught of water does not exceed 18 ft., may also ride there in perfect safety. It is formed by a long reef of rocks running out to the N.E., and by other reefs to the E. In the deepest part there are from 5 to 6 fathoms water. It is defended by the new Spanish and French forts, the reef and insulated rocks on the W., and by two other forts on the beach to the E. It is the principal entrepôt for the maritime trade for the regency.

The subjoined table shows the total value of the imports and exports from and to various countries at the port of Tripoli, in the year 1864:—

| Countries | Imports | Exports |
|-------------------------------------|---------|---------|
| | £ | £ |
| Great Britain and Possessions . . . | 26,880 | 16,670 |
| Italy | 13,900 | 44,670 |
| Turkey | 9,690 | 22,500 |
| France | 2,600 | 11,500 |
| Tunis | 1,000 | 12,260 |
| Venice | 2,700 | 4,000 |
| Total | 56,770 | 121,600 |

The shipping, in 1864, comprised 234 vessels, of 20,739 tons, which entered the port. Of these, 37 vessels, of a total of 5,047 tons, with cargoes of 28,200l. in value, sailed under the British flag.

TRIPOLI, or TARABULUS, a town and sea-port of Syria, cap. of the pachalic of its own name, on the Mediterranean, 130 m. SW. Aleppo. Lat. 34° 26' 22" N., long. 35° 51' 32" E. Pop. estimated at 15,000. The town stands at the foot of a branch of Mount Lebanon, on a small triangular plain, at some little distance from the sea: the Marina, SW. from the city, on ■ projecting point of land, is the place where merchant ships usually load and unload their cargoes. Tripoli is one of the neatest towns in Syria, and is surrounded by fine gardens; but its neighbourhood being marshy, its climate is frequently unhealthy. It is tra-

is too shallow to be navigable even for boats. The houses are principally of stone, and many parts of the city bear traces of the architecture of the Crusaders, particularly some high Gothic arcades over certain streets; but there are no public buildings worth notice. Tripoli is commanded by an old castle on the heights behind, built during the Crusades by the Count de Toulouse. The name *Tripoli* is derived from its being formerly divided into three separate towns at short distances from each other; and, in fact, El Mina, as the Marina is sometimes called, is a distinct town from Tripoli proper. Numerous granite columns and other ruins may still be seen along the shore. The port of Tripoli, to the N. of the Marina, and opposite the town, is merely a roadstead, sheltered on the W. by some rocky islets, and is safe only in fine weather. It is dangerous in winter, and particularly at the equinoxes, from the foulness of the bottom and the prevalence of strong gales. It has, however, some trade, exporting silk, wool, cotton, and tobacco, with small quantities of oil, wax, cochineal, galls, and soap, manufactured in the town. There are numerous Greeks among the inhabitants, and a large share of the trade is in their hands. It is, also, the see of a Greek bishop, and the residence of several European consuls.

Tripoli was taken by the Crusaders in 1108. It had previously been one of the most flourishing seats of Oriental literature, and possessed a very large collection of Persian and Arabic works. It is said that 100 copyists were constantly kept employed copying manuscripts, and that the princes of Tripoli were in the habit of sending messengers into foreign countries to discover and purchase rare and valuable works. Unfortunately, however, this extensive and precious collection, amounting, it is said, to 100,000 vols., was destroyed by the Crusaders, who displayed on this occasion the same fanatical zeal of which they accused, though perhaps unjustly, the Arabs in the case of the Alexandrian library. (See ALEXANDRIA.) A priest in the suite of Count Bertrand de St. Gilles, having visited an apartment of the library in which were a number of duplicate copies of the Koran, reported that it contained none but the impious works of Mohammed, and that, consequently, it should be destroyed. And thereupon it was forthwith set on fire. Balbi states, after Quatremère de Quincy, that this library contained no fewer than 8,000,000 vols. (Bibliothèques de Vienne, p. 81.) Michaud most properly rejects this statement as incredible and absurd, and adopts in preference the reasonable account given by Novairi. (Histoire des Croisades, ii. 43, ed. 1841.)

TRIPOLIZZA, or TRIPOLITZA, a town of the kingdom of Greece, cap. dep. Mantinea, and, under the Turks, the cap. of the Morea, near the centre of which it is situated, 20 m. S. by W. Argos. Pop. 8,150 in 1861. The town stands in a plain nearly 2,000 ft. above the level of the sea, and before the late war was about 3 m. in circuit, and probably more populous than Athens; but we can form no estimate of its present population. It is of modern origin, and is supposed to owe its name to its having been principally constructed of the ruins of the three cities of Tegea, Mantinea, and Pallantium, the sites of all which are at no great distance. Previously to the Greek revolution it had some large and conspicuous buildings; but it suffered severely during its capture and sack by the Greeks in Oct. 1821, and its ruin was completed when it was retaken by Ibrahim Pacha in 1825: an arched gateway is now said to be the

is again rising from its ruins, and is the seat of one of the treasures in Greece and of other government establishments.

TROAD (THE), or site of the ancient city of Troy, and the scene of the battles described in the *Iliad*. The situation of this classical region has been pointed out with sufficient precision by Homer, and has been admitted, from the earliest antiquity, to comprise that portion of Asia Minor bounded by, and immediately S. of, the W. entrance to the Hellespont, opposite the island of Tenedos, having Mount Ida on the E., and the gulf of Adramyti on the S. Here, no doubt, are the *campi ubi Troja fuit*:—

'Hac ibat Simois; hic est Sigeia tellus;
Hic steterat Priami regia celsa senis;
Illic Æacides, illic tendebat Ulysses;
Hic lacer admissos terruit Hector equos.'
Ovid, *Heroides*, i. lin. 33.

But, notwithstanding the immortality of renown that has been conferred on the 'heaven-built' city, and the interest which the Troad has always excited, such have been the changes brought about by the influence of war, the ravages of barbarians, and the lapse of ages, that it is now no easy matter to reconcile the descriptions of Homer with the existing appearances of the country.

The Troad has been examined by several learned travellers, including Chandler, Wood, Chevalier, Clarke, Hobhouse, Gell, and others. But as none of them had the means of making a proper topographical plan of the country, and as its appearance, and especially the magnitude and even number of the rivers, differs at different seasons of the year, we need not be surprised at their conflicting statements, even had they not been mostly under the influence of some preconceived theory. The system of Chevalier, which for a while was pretty generally acquiesced in, was founded on the assumption that the Mendere, the principal river of the Troad, was the Simois, and that the small river to the S. of the latter, the Bournabashi or Kerki-joss, was the Scamander of Homer. This hypothesis is now, however, generally abandoned, and it is indeed surprising it should ever have obtained currency. Inasmuch, however, as it would be impossible to make minute details intelligible without the aid of a map, we shall merely observe that Major Kennel and Mr. Maclaren have all but demonstrated that the Mendere is identical with the Scamander of the *Iliad*; and the suggestion of Dr. Chandler, that the Thymbrius (now the Dumbrek-soñ), a river to the NE. of the Mendere, with which it unites before they fall into the sea, is the Simois of Homer, appears to be satisfactorily established by Mr. Maclaren. It is, in fact, the only river in the Troad, excepting the Mendere, that in any respect corresponds with the descriptions given in the *Iliad* of the Simois; and the plain between the Mendere and the Thymbrius is the only one of sufficient extent to allow of the battles described by the poet being fought.

Dr. Clarke has conclusively shown (iii. 133, 8vo. ed.) that the ruins at *Palaio Callifat*, or Isarlik, are certainly those of the New Ilium of Strabo. They are situated on a rising ground about 3 m. from the sea, and about midway between the Mendere and Thymbrius. Here the learned traveller found not only the traces but the remains of an ancient citadel; and at the very moment of his visit the Turks were employed in raising vast blocks of marble from the foundations of this edifice, which exhibited the colossal and massive style of architecture peculiar to the early ages of Greek history. The ground around was

covered with fragments of broken pottery, and medals have been discovered among the ruins.

In the time of Strabo, New Ilium, whose position is thus clearly identified, was believed by its inhab. to occupy the identical site of the ancient city, and such had been the belief uniformly entertained by them from the earliest period: 'Hence,' says Tacitus, '*Ilienses antiquitatis gloriâ pollebant*.' (Annal., lib. iv. cap. 55.) Strabo, however, places the old city considerably more to the E., but we agree with Mr. Maclaren in rejecting this statement, and in believing that the old and new city stood upon the same site. The fact is, that a city taken by an enemy, and given up to military execution, is never completely destroyed; the foundations, with portions of its walls and temples, are always sure to remain, and these with the ruins afford many facilities for the construction of a new city. There is no reason to think that the destruction of Troy was in any respect more complete than that of Thebes by Alexander the Great, and yet the latter was rebuilt in the course of 20 years. And it is further to be observed, that the conqueror now named visited New Ilium, in the full conviction that it represented the ancient city, sacrificed to Minerva and the manes of Priam, conferred immunities on the inhabs., and gave orders that the walls of the town should be rebuilt, which intention was carried into effect after his death by Lysimachus. It is childish to suppose that Alexander should have done this unless he had been satisfied of the identity of the old and new city; and neither Arrian, nor any one else of his historians, so much as insinuates a doubt upon the subject. It would be rash and unwarrantable to set aside such evidence on the sole authority of Demetrius of Scepsis, who has, in this instance, been followed by Strabo, more especially as it has been shown that the site of New Ilium corresponds incomparably better with the Ilium of Homer than any other site on the Troad.

Perhaps it may be said, that, before endeavouring to point out the situation of Troy, it might have been as well to enquire whether that city ever existed, and whether any such war as that of Troy was ever carried on. But such enquiries would be wholly misplaced in a work of this kind; and though it had been otherwise, they would be wholly superfluous. It is the mere wantonness of scepticism to call in question the existence of Troy. Even if there were nothing more, the *Iliad*, which obviously describes real and not fictitious events, would be conclusive of the question; and when we add the concurrent testimony of the most ancient and best Greek authors, including Hesiod, Herodotus, and Thucydides, and the traditions universally prevalent as to the event, we should be quite as much disposed to deny the existence of Nineveh, Babylon, or even Jerusalem, as of Troy.

Exclusive of Troy, the Troad contained, at a later period, some other cities, such as Sigeum, on the seashore, at the mouth of the Hellespont, near the promontory of the same name, and adjoining the barrow or mound called the tomb of Achilles. It was founded posterior to the siege of Troy by an Æolian colony. It had, however, ceased to exist in the time of Strabo. But the town of Alexandria Troas, on the coast, about 17 m. S. from Sigeum, was by far the most important of the towns in the Troad built after the destruction of Troy. It was founded by Antigonus, one of Alexander's generals; and became, under the Romans, one of the most flourishing of their Asiatic colonies. (Strabo, lib. xiii.) It is twice mentioned in the 'Acts of the Apostles,' and was the scene of

a miracle. (Acts, caps. xvi. and xx.) Its site, now called *Esaki Stamboul*, is identified by the remains of walls and other buildings, including a theatre, gymnasium, and a magnificent aqueduct, that sufficiently attest its ancient magnificence.

TRONDHJEM (vulg. *Drontheim*), a town and sea-port of Norway, cap. prov. of its own name, on the Nid (whence its an. name *Nidrosia*), at its mouth, in the deep gulf called Trondhjem-fiord, 275 m. NE. Bergen. Pop. 16,012 in 1861. The fortress of Munkholm, bristling with cannon, stands on a small island in the fiord opposite the city; but it is more serviceable as a prison than a military outwork. Trondhjem is, on the whole, well built, though its houses are almost all of wood. The streets are spacious, with water cisterns at their intersections; and the town has a singular air of cleanness and comfort. The most remarkable edifice is the cathedral, built principally of stone, and founded early in the 11th century, though little of the original structure remains; that little, however, is enough to show that it had been originally one of the most magnificent ecclesiastical structures in Europe. Part of the architecture is Saxon, the rest Gothic, and round and pointed arches are frequently intermixed. The extreme length has been 346 ft., and its breadth 84 ft.; but the W. end, where was the grand entrance, had a chapel at each corner, making the breadth of that front 140 ft. Only the transept and E. end of the building are now roofed in and used; the W. part serves for a timber yard. There are three other churches, all plain structures; a hospital for the aged and infirm; a workhouse; a public library and museum, in which are collections of books, minerals, natural history, and antiquities, a public grammar school, Lancastrian schools, a theatre, and many hospitals and charitable institutions. The palace of the military commandant, though constructed wholly of wood, is held the first edifice of its kind in Scandinavia.

The town is governed by a corporation of twelve persons, elected from among the mercantile body; and is the seat of the superior courts, for all the country N. of the Dovre-fjeld. The roadstead of Trondhjem is but indifferent, being unprotected both on the N. and W., and the bottom loose ground in 20 fathoms: the river does not admit vessels drawing more than 10 or 12 ft. water. Dried fish, tar, deals, and copper from Roraas, are the principal articles of export. Trondhjem-fiord never freezes; and the cold of winter, though severe, is not nearly so great as at Roraas, which lies more to the S. The surrounding country is studded with merchants' villas; and immediately beyond the town is an extensive suburb, reached by a good wooden bridge across the river.

Trondhjem is connected by a continuous carriage-road with the Swedish capital; and there are steamers running between Trondhjem and Hammerfest, calling off Tromsø and other intermediate ports, from spring till Sept. English is understood and spoken by many of the inhabs. The lower classes generally read and write; and, among the opulent, many are distinguished for their literary taste.

TROIS RIVIERES. See **THREE RIVERS.**

TROND (ST.), Flem. *St. Truyen*, a town of Belgium, prov. Limbourg, cap. cant., on a tributary of the Demer, 20 m. W. by S. Maestricht. Pop. 11,039 in 1860. The town is supposed to owe its origin to a Benedictine abbey, founded here in 657: it was formerly fortified; but its works were dismantled in 1697. It has a considerable manufacture of fire-arms, and some

took place between the French and Austrians, in its vicinity, in 1793.

TROON, a sea-port town of Ayrshire, on a point of land projecting into the sea, 6 m. N. by W. Ayr, and 8 m. SW. Kilmarnock. Pop. 2,427 in 1861. Troon is a neat, well-built town. The par. church is at Dundonald, about 4 m. distant; but it has a chapel-of-ease and a chapel belonging to the United Secession church. Troon Harbour, on the N. side of the promontory on which the town is built, is the most accessible of any on the Ayrshire coast, has 16 ft. water at low spring ebbs, and sufficient accommodation for a great number of ships. Its advantages had, however, been wholly neglected till it came into the possession of its present proprietor, the Duke of Portland, who has constructed a large dry or graving dock, for the building or repair of vessels of large size; a smaller dry dock and a wet dock, that will accommodate 50 sail. It is also furnished with commodious warehouses and a harbour-light. The Troon has been united, by a railway, with Kilmarnock, by which it has been made, to some extent at least, the port of the latter. Great quantities of coal are raised in the vicinity, which, being brought to this port by the railway for shipment, are exported to the amount, in ordinary years, of about 168,000 tons. Ship-building employs from 100 to 200 hands; and rope and sail-making, and the trades connected with them, are also carried on to some extent. On the 1st of Jan. 1864, there belonged to the port 7 sailing vessels, of 915 tons burthen. The Glasgow, Paisley, and Ayr railway passes within less than a mile of Troon, with which it is connected by a branch railway.

TROPEZ (ST.), a maritime town of France, dép. Var, on a bay of the Mediterranean, 38 m. E. by N. Toulon. Pop. 3,358 in 1861. The inscriptions, medals, &c., found here prove that it occupies the site of *Heraclea*, an important maritime town of antiquity. It has a citadel, and towards the sea is defended by some old walls; its port is spacious and good, but is little frequented, except by fishermen, which comprise a large proportion of its inhabs. St. Tropez is the seat of a tribunal of commerce, a council of prud'hommes, and a school of navigation.

TROPFAU, a town of the Austrian dominions, cap. Austrian Silesia, and of the principality and circle of its own name; on the Oppa, a tributary of the Oder, 37 m. NE. Olmutz, on a branch line of the railway from Vienna to Cracow. Pop. 13,861 in 1857. The town is walled, and entered by four gates, and is well built. Its principal edifices comprise a castle, town-hall, theatre, high school, and sundry churches. It is the seat of courts for its province, circle, and duchy, a tribunal of commerce, a gymnasium, to which a flourishing museum was attached in 1814, and considerable manufactures of woollen and linen fabrics, with others of soap and leather.

Troppau was, from 20th Oct. to 20th Nov., 1820, the place of meeting of the diplomatic congress, which afterwards removed to Laybach.

TROY, a town or city of the United States, in New York, co. Rensselaer, of which it is the cap., on the Hudson River, 7 m. NNE. Albany. Pop. 39,230 in 1860. The town stands on the alluvial flat on both sides the river, but principally on the E. bank, where it is backed by some eminences dignified with the names of Mounts Ida and Olympus. It is regularly laid out, most of the streets crossing each other at right angles, and well built, the houses being commonly of brick, and some of stone. The thoroughfares are, in

shaded with trees, and well lighted. Many of the public buildings are elegant, particularly the court-house, with a Grecian front, and the episcopal church, one of the finest specimens of modern Gothic architecture in the United States. There are many churches for other sects, 2 large female seminaries, the Rensselaer Institute, a lyceum of natural history, academy, Lancastrian school, orphan asylum, house of industry, county prison, mechanics', national, and other halls. The city is abundantly watered by subterranean iron pipes from a basin in the neighbouring town of Lansingburg, 72 ft. above the city plain. The height and volume of water are sufficient to furnish *jets d'eau* in the city, and to throw large streams, in case of fire, through hose, without the intervention of engines. Two streams join the Hudson within the city, and afford water power for many factories. Troy has several cotton mills, with paper and slitting mills, nail and iron works, breweries, tanneries, and leather factories. The trade of Troy by land is with an extensive range of country E. and N., within which there are above a hundred cotton factories. W. Troy is on the United Champlain and Erie canal, and at present communicates with the rest of the city by a bridge. Rensselaer and Saratoga railroad crosses the Hudson at Troy by a bridge 1,600 ft. in length, resting upon 8 stone piers. Troy was first incorporated in 1796, and has now become the third city in the state, in wealth and importance.

TROWBRIDGE, a market town and par. of England, co. Wilts., hund. Melksham, on a tributary of the Avon, the Were, which is here crossed by a stone bridge, 21 m. NW. Salisbury, and 105 m. WSW. London by Great Western railway. Pop. 9,626 in 1861. The principal street is spacious, but the others are generally narrow and inconvenient, and though some of the houses are good, the greater proportion are but indifferent. Many are, however, constructed of stone, and the town is paved, and lighted with gas. Trowbridge Church, a large and striking edifice, consists of a nave, chancel, two side aisles, with attached chapels, in the windows of which is a good deal of stained glass, and lofty N. and S. porches. The two side aisles are separated from the nave by five pointed arches, springing from clustered columns, and are externally embellished and ornamented with crocketed pinnacles: at the W. extremity is a large tower with a tapering spire. The living, a rectory, worth 600*l.* a year, is in the gift of the Duke of Rutland. Trinity Church, at the W. end of the town, is a fine building, with a considerable number of free sittings. It has, also, meeting-houses for General and Particular Baptists, Presbyterians, Wesleyans, Independents, and other dissenters; a free school and an almshouse. The manufacture of woollen cloth was established in Trowbridge at an early period. Cassimeres, fancy kerseys, and tweeds, and other narrow woollens, are the principal products. The Kennett and Avon canal passes about 1 m. N. of the town, placing it in communication with London on the one hand and Bristol on the other. Trowbridge is under the jurisdiction of the co. magistrates, who hold petty sessions here monthly, and a court of requests, for debts not above 5*l.*, every three weeks. Markets, Tuesdays, Thursdays, and Saturdays: fairs, Aug. 5 to 7, for cattle.

Crabbe, the poet, was for 18 years rector of this par., where he died, Feb. 3rd, 1832.

TROYES (an. *Trece* and *Augustobona Tricassium*), a town of France, dép. Aube, of which it is the cap., on the Seine, which partly surrounds it,

and is partly diverted into its interior by numerous canals, for the supply of its various factories; 92 m. ESE. Paris, on the railway from Paris to Basel. Pop. 34,613. The town is inclosed by an old wall in pretty good condition, and has several suburbs. The town is but ill-built, most of its houses being constructed of timber; though some of its new quarters are clean and sufficiently well laid out. Before the Revolution, Troyes comprised 22 pars., but their number has since been greatly diminished. The cathedral is a fine Gothic structure, chiefly constructed on the site of a previous edifice, in the 13th century, though not finished till towards the end of the 16th. Its interior length is 374 ft.; breadth, 164 ft.; height of the vault, 96 ft., and of the cupola externally, 204 ft. There is a good deal of curious stained glass in this church, the figures representing the kings of France, counts of Champagne, bishops of Troyes, and other personages of the 13th century, in the peculiar costume of that period, and of the size of life. Some of the other churches deserve being visited. The town-hall is an edifice of the 17th century, with a handsome front, and a hall in which are the marble busts of the most distinguished natives of Troyes. The museum contains collections of mineralogy, natural history, and paintings; and the public library is said to comprise 55,000 printed vols., and nearly 5,000 MSS. The hall in which these works are placed is about 160 ft. in length, and 30 ft. in width; and on its panels are paintings by Gonthier, representing the principal achievements of Henry IV. The prefecture, bishop's palace seminary, hospital, court-house, public baths, and abattoir are the other most remarkable buildings. The environs are particularly beautiful. It is the seat of courts of primary jurisdiction and commerce, a chamber of commerce, council of prud'hommes; the residence of an inspector-general of navigation. It has manufactures of cotton, hosiery, calico, woollen cloths, blankets, and cotton and woollen yarn; with bleaching establishments, for which the water of the Seine is said to be most suitable; and paper-mills.

Troyes was formerly the cap. of Champagne, and it was here that Hen. V. of England espoused Catherine of France. In 1429 it was taken from the English by the French troops, under Joan of Arc. In the campaign of 1814, it was the headquarters of Napoleon. Among the distinguished individuals, natives of Troyes, may be specified Pope Urban IV., the sculptor Girardon, and the painter Mignard.

TRURO, a parl. and mun. bor. and market town of England, co. Cornwall, hund. Powder, on the Fal, 7 m. N. by E. Falmouth, and 230 m. WSW. London, on the Great Western railway. Pop. of parl. bor. 11,337 in 1861. Truro is the handsomest, and, including its suburbs, the largest town in Cornwall. It owes its increase and prosperity partly to its being in the centre of an important mining district, and a principal stannary town, and partly to its situation on a river navigable at high water by vessels of 100 tons. The streets are partially paved, and lighted with gas. The town and bor. are comprised in the 3 pars. of St. Mary, Kenwyn, and St. Clement's. St. Mary's church is built of Roberough stone, which, at first sight, seems like granite, in a rich and beautiful perpendicular style. The interior has, however, been modernised; and a steeple has been attached to the church. The living, a rectory worth 135*l.* a year, is in the gift of Lord Mount Edgcumbe. There are meeting houses for Independents, Wesleyans, Baptists, Unitarians, Friends, Bryanites, and various other sects; and a grammar school.

founded in 1760, which has an income of 100*l.* a year, with two exhibitions at Exeter College, Oxford. Sir H. Davy received his early education in this school. It has also an almshouse and several minor charities, town and coinage halls, a county infirmary, barracks, theatre, workhouse, a small gaol, a subscription library, and several societies for instruction or amusement. The exports of Truro consist chiefly of tin and copper, with some paper and carpeting made in the town.

Truro is of high antiquity, and had formerly a castle built in the reign of Henry II., and some other ancient edifices; but these no longer exist. It is said to be a bor. by prescription; its earliest charter appearing to have been one granted by Reginald, earl of Cornwall, at an uncertain date, but certainly before 1280. It is now divided into 2 wards, and is governed by a mayor, 5 aldermen, and 18 councillors. It has a commission of the peace, a weekly court of record, and some minor courts. It has sent 2 mems. to the H. of C. since the 23 Edward I., the right of voting, down to the Reform Act, having been in the mayor and 26 capital burgesses. The old parl. bor. comprised only the central part of the town, and the adjacent part of Kenwyn par., but the Boundary Act at least doubled its former extent. Registered electors, 631 in 1865. Markets, Wednesday and Saturday, and a cattle market the first Wednesday in every month: fairs, four times a year, principally for cattle.

TRUXILLO, or TRUJILLO, a town of Spain, in Estremadura, prov. Caceres, cap. dep., on the Tozo, a tributary of the Tagus, and on the high-road between Madrid and Lisbon, 184 m. SW. by W. the former. Pop. 4,977 in 1857. Truxillo is divided into the city, the old town, and the citadel, which successively occupy the foot, acclivity, and summit of a hill facing the S. The city is the newest portion; it is well laid out, and has a fine square, and several handsome residences, most of the wealthy inhabitants having removed thither from the old town. In the square is a large mansion, once belonging to the family of Pizarro, a native of Truxillo; the front of which is ornamented with bas-reliefs representing the conquest of Peru. The old town, surrounded by a wall, is ill-built and dirty; but the castle, with a mixture of ancient and Saracenic architecture, is imposing; and the appearance of Truxillo at a distance is very prepossessing. It has the usual complement of churches and convents, with several hospitals, and manufactories of leather and linen fabrics.

The name of this town appears to be a corruption of *Turris Julia*. It is supposed to be the *Castra Julia* of Ptolemy, and several Roman antiquities have been discovered in the town and neighbourhood.

TRUXILLO, or TRUJILLO, a town of Colombia, in Venezuela, cap. prov. of its own name, in a mountainous valley, 150 m. SE. Maracaybo. Pop. estimated at 8,000. It is said to have been one of the finest and most opulent cities of this part of America, previously to its being pillaged by the bucaneer Gramont, in 1678, when most of its inhabs. fled to Merida. The valley in which the city is built is so narrow as to admit nowhere of more than two parallel streets, and the houses are small and mean. There are Dominican and Franciscan convents, a college, and several schools. The climate is healthy: the adjacent lands produce sugar, cocoa, indigo, coffee, and wheat; the mutton is larger and finer than in any other part of the prov. The inhabs. make superior cheese and preserves, and are famed for cleaning and carding

wool. Its trade is principally northward with Carora and Maracaybo.

TSCHERKASK (NOVI or NEW), a town of European Russia, cap. of the country of the Don-Cossacks, on a hill adjoining a tributary of the Don, 290 m. SSE. Voroneje. Pop. 12,618 in 1858. The town is wholly modern, having been founded under the auspices of Platoff in 1805: its streets are regular and broad, but most of the buildings are of wood. A triumphal arch, of hewn stone, stands at either extremity of the main thoroughfare, and there is a large square in which Platoff had begun to build a residence for himself. The town is a bishop's see, and has a new cathedral, gymnasium, circle-school, hospital, and arsenal. It is the seat of all the government offices for the Don-Cossack country, which were removed thither, in 1807, from Staro, or Old Tscherkask, on the Don, about 10 m. S. by E., in consequence of the inundations to which the latter was subject. The new cap. is favourably placed to avoid this evil, but it labours under a great drawback in being near no navigable river. Staro-Tscherkask, which formerly had 15,000 inhabs., has now dwindled into insignificance. The new town has annually four large fairs, to one of which goods to the value of upwards of 2,000,000 roubles are frequently brought.

TUAM, an inland city of Ireland, prov. Connaught, co. Galway, on a small river, 15 m. E. Lough Corrib, and 105 m. W. by N. Dublin, on the Midland Great Western railway. Pop. 4,542 in 1861. The principal streets diverge from the market-place, in the centre of the town, and some of them have latterly been widened and much improved. Still, however, much squalid poverty is to be found in the town and its wretched outlets. It is of considerable importance, in an ecclesiastical point of view, having been till recently the seat of a Protestant, as it still is of a Catholic archbishop. But, in 1839, on the demise of the Protestant prelate, the see was reduced from an archbishopric to a bishopric, suffragan to Armagh. The Protestant cathedral is a small plain building, but the Roman Catholic cathedral is a splendid structure, and one of the finest of the modern Roman Catholic churches in Ireland. Here, also, is the Roman Catholic college of St. Jarlath, founded in 1814, usually attended by about 140 pupils. It has also a nunnery, a diocesan school, and other public schools, a court house and gaol, and barracks. The town comprises the palace and handsome demesne of the Protestant bishop. Tuam sent 2 mems. to the Irish H. of C. down to the Union, when it was disfranchised. General sessions are held twice a year, and petty sessions on Wednesdays: it is a constabulary station. The manufacture of coarse linens and leather is carried on to some extent; and it has a brewery and flour mills, and a weekly newspaper. Markets on Wednesdays and Saturdays: fairs, May 10, July 4, Oct. 20, and Dec. 15.

TUBINGEN, a town of S. Germany, kingd. Würtemberg, circ. Schwartzwald on the Neckar, 17 m. SSW. Stuttgart, with which it is connected by railway. Pop. 8,709 in 1861. Tübingen is old and irregularly built: its principal edifice is the castle, formerly the stronghold of the pfalzgraves of Tübingen, but now appropriated to the university of Würtemberg. This university was founded in 1477; and the famous reformers, Melancthon and Rauchlin, were among its earliest professors: it has both a Roman Catholic and a Protestant theological faculty. The university has an observatory, botanic garden, cabinets of mineralogy and zoology, and a good library. The chief support of the inhabs. of Tübingen is de-

rived from the supply of this and the other public schools, but they have also a few manufactures of woollens and gunpowder.

TUCUMAN, a town and cap. of the prov. of the same name, in the Argentine republic, in a fertile plain on a tributary of the Medinas, and on the high road between Buenos Ayres and Potosi; about 315 m. NNW. Cordova; lat. 26° 49' S., long. 64° 55' W. Pop. estimated at 13,000. It has a cathedral, several convents, and a Jesuits' college; but the inhabs. generally, from their remote inland position, appear to have made little progress in science, or the arts of civilised life. Their principal trade is in oxen and mules.

Tucuman was founded in 1685. It is memorable in history as the place at which the declaration of the independence of the Plata provs. was first promulgated, and where their first congress was held in 1816.

TUDELA (an. *Tutela*), a city of Spain, prov. Navarre, in which it holds the second rank on the Ebro, where it is joined by the Queilos, and near the commencement of the great canal of Aragon; 50 m. NW. Saragossa, on the railway from Saragossa to Bilbao. Pop. 8,925 in 1857. The Ebro is here crossed by a noble bridge, of uncertain origin, 400 yards in length, having 17 arches. Tudela was formerly fortified, but nothing remains of its ancient walls except the gates. Its streets are narrow, crooked, and dirty; its houses lofty, and mostly of brick: there are many private and some public fountains, and the remains, in several places, of baths, constructed by the Moors. Along the river are some shaded public walks. It has a cathedral, in which Blanche, of Castile, the queen of Peter the Cruel, was buried; many other churches and convents, two hospitals, an orphan asylum, workhouse, prison, society of public good, Latin and medical schools. Its inhabs. manufacture coarse woollens, hair fabrics, soap, tiles, bricks, and earthenware, and trade in oil, flour, and wine, esteemed the best in the prov. Tudela has two large annual fairs; one from 1st to 21st March, and the other from 22d July to 10th August.

It has given birth to several distinguished characters, including, amongst others, the Jewish traveller of the 12th century, the rabbi Benjamin Ben Jonah, commonly called Benjamin of Tudela. On the 23d of Nov., 1808, a French army, under Marshal Lasnes, completely defeated, in the vicinity of this town, a greatly superior Spanish force under Castaños. The latter lost about 8,000 men, killed, wounded, and prisoners, and were completely dispersed.

TULA, a gov. of European Russia, principally between the 53rd and 55th degs. of N. lat., and the 36th and 39th of E. long., having N. the government of Moscow, E. that of Riazan, S. Orloff, and W. Kaluga. Length, about 130 m.; average breadth, about 85 m. Area estimated at 11,200 sq. m. Pop. 1,172,249 in 1858. This is one of the most populous of the Russian governments. It slopes generally to the N. and E., in which direction the Oka flows, forming its NW. and N. boundary. The Don, rises in this government. The surface is an undulating plain, and, though not very fertile, it produces a good deal of corn, with beans, turnips, mustard, flax, hemp, tobacco, potatoes, and other vegetables. The peasants, almost everywhere, have gardens in which they grow fruit, the climate being tolerably mild and healthy. Iron is abundant, and in the neighbourhood of the cap. iron mines extend over an area of 10 sq. m.; but the metal is of inferior quality, and iron is one of the chief imports into the government. A bad sort of coal has, also, been

met with, but wood and charcoal continue to be the principal fuel used in the forges and other factories. Forests cover about one-sixth part of the surface. The dwellings, or rather the huts, of the peasants, are paltry in appearance, and simple in structure. Except in the capital there are hardly any manufacturing establishments other than tanneries, breweries, and distilleries, the last two being on a very extensive scale. The exports consist principally of corn, hemp, and flax, with cutlery, jewellery, and hardware, from Tula; the latter, with Brelef, being the chief seat of commerce. In this government is the canal of Ivanof, uniting the Oka with the Don, excavated by the Swedish prisoners in Russia early in the 18th century. Tula has been a separate government since 1796; it is divided into 12 districts: chief towns, Tula the cap., Brelef, Venef, and Odölef. Its inhabs. are nearly all Russians, with some German colonists. In respect of public instruction, Tula is subordinate to the university of Moscow.

TULA, a town of European Russia, cap. of the above government, on both sides the Upa, 110 m. S. Moscow, on the railway from Moscow to Orel. Pop. 57,705 in 1858. This town, the 'Sheffield and Birmingham' of Russia, is one of the most interesting in the empire. Seen from a distance, it has an imposing appearance. A very handsome church, with white columns, appears above the town, which occupies an extensive vale, and is filled with spires and domes. The entrances, on both the N. and S. sides, are through triumphal arches, made of wood painted to imitate marble. It is divided into several quarters, the communication between them being kept up by a number of wooden and stone bridges; and there are several suburbs. There are two convents and twenty-six churches in Tula, all of stone; but the edifices which chiefly attract the stranger's attention are the gun manufactory, the gymnasium for the government; Alexander's school, opened in 1802 for the education of youth, at the expense of the nobility; the foundling hospital, a branch of that of Moscow; the house of correction, prison, arsenal, theatre, *gostinói door*, or building for the preservation and sale of merchandise. The shops in the latter present more activity and industry than are usually met with in Russian towns, and some of the merchants are reputed rich. There is a continual mixture of wood and stone houses; but some streets are lined on both sides with stone edifices, many of which are massive and in good taste.

The musket manufactory, though commenced at an earlier period, is indebted for its original importance to Peter the Great. It was remodelled and improved by Catherine II. in 1785; but its present excellence is mainly owing to Mr. Jones of Birmingham, invited into Russia in 1817. About 7,000 men and 9,600 women are employed in this factory, besides 3,500 hands in subsidiary occupations. About 70,000 muskets and 50,000 swords are said to be annually made here, exclusive of great numbers of carbines, pistols, bayonets, and pikes. The metal employed comes wholly from Siberia, and is of excellent quality. The workmen in the gun factory enjoy peculiar immunities and privileges; they form a separate body, and have their judges selected from among themselves. They are divided into five trades; barrel-makers, lock-makers, stock-makers, furnishing-makers, and makers of small arms. The arms made at this factory, though they want the neatness and finish of the muskets of Birmingham, are of very good quality. Some, also, of the fire arms and swords made here are very highly finished; but these are

comparatively high priced. Among the other fabrics of Tula are mathematical and physical instruments, jewellery, and platina wares, with silk and hat fabrics. The town is the residence of a military governor, with authority extending over the governments of Tula, Tamboff, Riasan, Orlof, Voroneje, and sometimes Kaluga.

Ancient Tula, which existed in the twelfth century, did not occupy the site of the modern town, though it was at no great distance. The present city was founded in 1509, by Vassili-Ivanovitch, who fortified it with a stone and brick wall. Its defences, however, were insufficient to prevent its being frequently plundered by the Tartars, it being on the high road to Moscow from the Crimea. It has often suffered severely from fire, the last visitation being in 1834.

TULLAMORE, an inland town of Ireland, prov. Leinster, King's co., of which it is now the cap., on the Tullamore river, an affluent of the Brosna, and on the line of the Grand Canal, in the centre of the Bog of Allen, 49 m. W. by S. Dublin. Pop. 4,791 in 1861. In consequence of its advantageous position on the Grand Canal, Tullamore, which in 1790 was an obscure village, has risen to be the principal town of the co. The streets are wide and regular, and the shops and private dwellings are most respectable. Large quantities of corn and other articles of provision are shipped here for the metropolis. In consequence of its increasing size and importance, the assizes and other co. business were transferred thither in 1833 from Philipstown. The principal public buildings are the court-house and gaol, on the radiating plan, which stand contiguous, on a raised platform, at the W. end of the town. It has also a parish church, a large Rom. Cath. chapel, a Quaker and two Methodist meeting-houses, some large public schools, a market-house, barracks, and infirmary. It is a constabulary station, has three breweries and two distilleries, and large quantities of bricks are made in the vicinity. Markets on Tuesdays and Saturdays. Fairs: May 10, July 10, and October 21.

Adjoining the town is Charleville Forest, the seat of its noble proprietor, the Earl of Charleville, to whose liberality and munificence the town is greatly indebted. The pleasure grounds are open to the inhabs.

TULLE, a town of France, dép. Corrèze, of which it is the cap., on the Corrèze, 72 m. SW. Clermont. Pop. 12,413 in 1861. The town stands partly on the steep declivities on either side the river, and partly on the narrow space of ground between. It is small, and its buildings are old and unprepossessing; but it has a pleasant promenade on the river's bank, good quays, many bridges, a church in a semi-Gothic, semi-Carlovingian style, a well-planned court of justice, some large buildings appropriated to a manufactory of fire-arms, a well-kept hospital, gendarmerie barracks, a departmental prison, college, seminary, theatre, and public library of 2,000 vols. It has several mansions ornamented with Gothic and other sculptures, testifying the opulence of its ancient families. One house in particular, in the principal square, called the *Maison Sage*, and dating from the fourteenth century, has its front decorated with arabesques in good taste and of superior execution. The cemetery of Tulle is in a remarkable situation, on an isolated hill commanding the town, on which also is a lofty square tower, supposed to have been built by the Romans, which has long served for a prison.

nails, and hardware, paper, and leather; but it is a curious fact, that though the linen fabric called *Tulle* most probably derived its name from this town, it is no longer produced either here or in the neighbourhood. It has twelve fairs a year, one of which, lasting the three first days of June, is a great mart for horses. The principal races within a circle of several déps. are held near Tulle. The town is supposed to be not older than the seventh century; but about 3 m. northward are the ruins of Tintignac, probably the *Ratiastum* of Ptolemy, exhibiting traces of a large amphitheatre, and of other extensive edifices.

TUNBRIDGE, or TONBRIDGE, a market town and par of England, co. Kent, lathe Aylesford, hund. Tunbridge, on the Medway, 27 m. SE. London, on the South Eastern railway. Pop. 5,919 in 1861. The town appears to have owed its origin to a strong fortress erected in the eleventh century, of which the entrance gate, flanked by two round towers, and part of the keep still remain. It consists principally of one long, wide, and pretty well built street, paved, lighted, and very clean. The public buildings include the church, grammar school, town-hall, and market-house. Several bridges cross the Medway, which is here divided into different streams, the principal being erected in 1775, from a design by Mr. Milne, architect of Blackfriars Bridge, London. There are several dissenting chapels. The grammar school, founded in 1554, by Sir Andrew Judd, a native of the town, is under the government of the Skinners' Company, and has one exhibition to either university of 18*l.*, two of 12*l.*, six of 10*l.*, and several to a less amount; besides which, 806*l.* are paid for master's salary, leaving a considerable annual surplus. There are about forty-five scholars on the foundation. Holme's school at Southborough, at which fifty children are taught the rudiments of instruction, has an income of 108*l.* a year; and there are several minor establishments for education, besides various other endowments for the benefit of the poor, amounting altogether to upwards of 50*l.* a year. The town has a market on Friday, and four annual fairs. The grammar school has had some very distinguished masters, among whom may be specified the learned Vicesimus Knox, D.D., author of '*Moral and Literary Essays*,' a treatise on '*Liberal Education*,' and various other popular and exceedingly useful works. Dr. Knox succeeded his father as master of the school in 1778; and having held the situation for thirty-three years, or till 1812, he was in his turn succeeded by his son. The doctor died at Tunbridge in 1821.

The favourite watering-place, Tunbridge Wells, is partly in this par. and partly in those of Speldhurst and Frant in Sussex, being about 5 m. S. Tunbridge, on the railway to Hastings. Tunbridge Wells consists of several divisions, as Mounts Ephraim, Sion, and Pleasant, and the Wells; the pump and assembly rooms, public parades, chapel of King Charles the Martyr being in the latter. The springs, which were first discovered in the reign of James I., soon attracted the notice of the fashionable world. Henrietta Maria, queen of Charles I., paid a visit to the wells; but there being at that period no houses nearer than Tunbridge, and those not particularly suitable for such a guest, her majesty and her suite lodged in tents pitched on Bishop's Down. The wells were also visited by Catherine, queen of Charles II., Queen Anne, and other distinguished personages. The water is a chalybeate, with an excess of carbonic acid gas, very similar to that

particulars; as in its manufactures, toys, boxes, and turned wares being made here in great variety, and also in its being much less frequented now than formerly by the leaders of the *haut ton*. The season for taking the waters continues from May to November. There are races in August, which are tolerably well attended. The church at Tunbridge is situated at the junction of the three parishes of Spedhurst, Tunbridge, and Frant, and is partly in each. The air of this district is pure and salubrious, and is, perhaps, little less efficacious than the waters in removing complaints.

TUNIS (an. *Zengitania* and *Bizacium*, the E. portion of the *Africa* of P. Mela, with part of *Gatulia*), a kingdom or regency of N. Africa, a nominal dependency of the Turkish empire, principally between the 33rd and 37th degs. of N. lat., and the 9th and 11th of E. long.; having SE. the regency of Tripoli, NW. that of Algiers, S. and W. the desert, and N. and E. the Mediterranean. Length N. to S. about 400 m. Its area has been roughly calculated at 72,000 sq. m. The pop. has been variously estimated; but it may be taken at about 2 or 2½ millions, of whom from 7,000 to 10,000 may be Turks, about the same number Christians, 112,000 renegades, 100,000 Jews, and the remainder Arabs, Moors, and Berbers, the Arabs being the most numerous. This territory is traversed by several branches of the chain of Atlas, one of which separates it from the *Bilud-el-Jerid*, or 'country of dates.' The S. part of the regency is mostly a sandy waste, and some other parts are desert; but many tracts are of the highest fertility, particularly those watered by the Mejerdah. This river, the *Bagrada* of the ancients, is formed by the union of two streams, on the W. frontier of Tunis, and runs thenceforward, generally NE., entering the Mediterranean about lat. 37° N., long. 10° E., a few m. N. of the site of Carthage. Flowing through a rich and fertile country, it becomes highly impregnated with soil:—

'Turbidus arenas lento pede sulcat arenas
Bagrada.' Silius Ital., lib. vi. 140.

The Mejerdah receives no large tributary, nor is there any other considerable river in the regency. In the S., about 40 m. inland, is the Sibbah, a remarkable tract 70 m. in length, NE. to SW., portions of which formed the *Palus Lybiae*, *P. Tritonis*, of antiquity. In winter it is covered with water to the depth of 2 or 3 ft., but at other times it is a dry plain, the surface being entirely covered with a salt incrustation. Sir G. Temple, who, in the dry season, spent seven hours in crossing the Sibbah, says (Excursions in the Mediterranean, ii. 160) that, on approaching it, 'the grass and bushes become gradually scarcer; then follows a tract of sand, which, some way beyond, is in parts covered with a very thin layer of salt; this, as you advance, becomes thicker, and more united; then we find it in a compact or unbroken mass or sheet, which can, however, be penetrated with a sword or other sharp instrument; and here I found it to be 11 inches in depth; and finally, in the centre, it becomes so hard, deep, and concentrated, as to baffle all attempts at breaking its surface, except with a pickaxe. The salt is considerably weaker than that of the sea, and is not adapted to preserving provisions; though its flavour is very agreeable.' About the centre of the lake are the foundations of a circular tower, where caravans halt to feed their camels; and in several parts are elevated plateaux, forming islands in the rainy season, the largest of which, covered with a luxuriant vegetation of date palms, is the *Bil-*

of Herodotus. The Arabs have a tradition that this lake once communicated with the sea by means of a river, but no traces of such communication appear to exist at present. There are no other inland lakes of consequence, but several considerable arms of the sea, as the Gulf of Biserta (an. *Sinus Hipponensis*) and the Lake of Tunis. The coasts of Tunis are greatly indented by bays, those of Tunis, Hamamet, and the Gulf of Gabes, or Lesser Syrtis, being the principal. The principal promontories and headlands are the Dakhul, a long tongue of land terminating in Cape Bon (an. *Prom. Mercurii*), the scene of several events in the 5th book of the *Æneid*; Capes Serra, Ras-el-abiad, or the white promontory (an. *P. Candidum*), and Ras-Zibceb (an. *P. Apollinis*). The shores in the N. are frequently bold, but in the S. they are low and sandy.

The geology of this country has been little or not at all studied; nor have its mineral resources been turned to profit for many ages. Copper and lead were among the exports of the Carthaginians; and these metals, with silver, are still to be found in the mountains: there is also a quicksilver mine near Porto Farina, but mining is altogether neglected. The climate appears to be less hot than might have been supposed. Sir G. Temple, already quoted, says, the average heat in Aug. and Sept. at Tunis is 83° Fah.; and in the year of his visit, the thermometer seldom rose to 96°, and never exceeded that limit. From the 19th Dec. 1832, to the 19th Jan. 1833, it averaged 55½°; the highest range during that period being 60°, and the lowest 52°. Rainy weather commences about the end of Oct., and continues, at intervals, till May. As early as Jan. the surface is covered with fresh verdure; and, on the whole, the climate may be said to be healthy as well as pleasant. It is true that the plague is not unfrequent, and that its ravages have been supposed to be a principal cause of the depopulation that is admitted to have taken place during the last half century. But this is to be ascribed far more to the sluttishness of the inhabs., and the want of precautions, than to any thing unfavourable in the climate.

The vegetation is, for the most part, the same as in the adjacent regency of Algiers, and on the opposite shores of Sicily and S. Italy; the olive, pistachio, carob, with dates, melons, and the lotus, are common products. This region was, in antiquity, celebrated for its extraordinary fertility. It exported large quantities of corn to Rome, of which it was one of the granaries. Pliny, in speaking of the extraordinary productiveness of the soil, states that a plant of wheat (*triticum*), sent from it to Augustus, had little short of 400 stalks; and another, sent to Nero, had 340. In antiquity, indeed, the common opinion was, that in this favoured region the labour of the husbandman was rewarded by the enormous increase of one hundred fold. Hence, says Silius Italicus:—

— 'seu sunt Byzaceæ cordi
Rura magis, centum Cereri fruticantia culmis.'
Lib. ix. lin. 204.

And it would still seem to be endowed with the same wonderful productiveness. Sir G. Temple says, that 'whilst halting in a field of young barley to feed our horses with its tempting crop, I counted on one plant 97 shoots or stalks, and this was not selected by me as being the largest, but as the nearest to where I was sitting.' (Excursions, ii. 108.) In fact, there cannot be a doubt, that were Tunis subject to an intelligent

nish large quantities of corn for exportation. At present, indeed, such is the undiminished fertility of the soil, that a surplus is raised for exportation, notwithstanding the oppression and extortion to which the husbandman must submit. The government assessor goes into a field while the crop is in ear, and values it according to his caprice; taking care, however, to be always above, and never below, the mark. The owner is then obliged to pay a tithe on this supposed value of his future crop, though, when harvest time has arrived, he finds, perhaps, that it does not exceed one-fourth part of the sum at which it was estimated. The same is the case with olives, the principal resource of the country; and these, moreover, are not allowed to be gathered till an order to that effect has been received; and in consequence of the great delay which often takes place in sending it, the fruit frequently falls and rots on the ground, the owner not being permitted to pick it up: he is also obliged to send his olives, when they have finally been collected, to mills established by the *bey*, who derives therefrom a considerable profit. (Temple, i. 225, 226.) We need not, therefore, be surprised that agriculture should be almost wholly neglected and abandoned, no one venturing to cultivate more ground than is sufficient to supply his immediate wants, and to furnish the taxes to government. Wheat, barley, sorgho, maize, and millet are the grains principally raised; in the S., the date tree supplies the Arabs, not only with their principal nutriment, but, also, with their fuel and the materials for most of their domestic furniture. Cotton and indigo have been introduced into culture somewhat recently; in some parts saffron, white mulberry, and opium are grown, and tobacco is pretty general. The sugar cane succeeds well, but no sugar is made. Here are all the fruits of southern Europe, as pomegranates, oranges, and lemons, figs, and jujubes; and the vines on the northern coast yield excellent raisins, most of which are dried for exportation, but apples and pears degenerate.

Among other products of importance is hennah (*Alhennah Arabum*), much used, says an English traveller, Mr. Shaw (*Travels in Barbary*), 'as a dye for ladies' hands and horses' legs,' and which is a chief article of trade at Gabes. This plant, where not annually cut and kept low, grows to 10 or 12 ft. in height, putting out clusters of small flowers, having an odour of camphor. The dye is a bright orange, or tawny saffron. The leaves are picked twice a year, dried and powdered, and in this state sold in all the markets of the E. The powder, formed into a paste, is applied to the part required, and then bandaged round. The plant is cut level with the ground as soon as the leaves have been picked. The hennah, like the date palm, requires to be frequently watered, for which purpose the plantations are divided into squares, and enclosed by banks; a stream is then admitted into them, and allowed to flow for a certain time every week, generally an hour a day, and two hours during the night, each square being watered in turn. The expenses of watering are defrayed by the various occupants, in proportion to their number of squares. This system of irrigation is noticed by Pliny. (l. lib. xviii. cap. 22.)

Horses, mules, camels, and oxen are used for field labour, and, with sheep, are the principal domestic animals. The breed of horses has, deteriorated, in consequence of the government seizing for its use those that are most valuable. The cattle are small, but good, and many are sent

African breeds. The Merino breed is said to have been originally introduced into Spain from Barbary. The lion, panther, jackal, wild boar, jerboa, and genet are among the wild animals. The banks of the Bagrada are celebrated in history for the stubborn resistance which an enormous serpent (120 ft. in length), found on its banks, is said to have opposed to the progress of the Roman army under Regulus! (Liv. Epist., lib. xviii.; Aulus Gellius, lib. vii. cap. 3.) But it is now generally acknowledged that many apocryphal statements have been mixed up with the history and fate of Regulus; and the *prælium grande atque acre* with the serpent does not certainly seem to be the most authentic part of the story. At all events, this gigantic brood of reptiles has now luckily disappeared; and Sir G. Temple says that the largest of those existing never exceed 12 ft. in length. The locusts, which often visit the country in clouds, eating up 'every green thing,' are incomparably more destructive than the reptiles. Large quantities of fine coral are found round the coasts, which are visited in consequence by Sicilian and Neapolitan fishermen.

Manufactures are few; they comprise some silk, linen and woollen fabrics, and leather; but the principal are soap and the *beretti*, or red caps of Tunis, so well known throughout the Mediterranean. The principal soap-works are at Susa. The soap is of good quality, and the soft especially is much esteemed. Little is prepared on a speculative anticipation of a demand for exportation, but any quantity may be had by contracting for it a few months beforehand. The manufacture of skull-caps is said to have employed formerly more than 50,000 persons, and 8,000 bales of Spanish wool were annually used. At present it is reduced to one-third of this extent, spurious imitations of the Tunis caps having been made in Marseilles and Leghorn. The dye employed for the caps is the kermes chiefly; the process of dyeing is conducted mostly at Zaghwan, an inland town, the water of which gives great brilliancy and permanency to the colours. Previously to their being dyed, the caps are boiled for a whole day in alum-water. The woollen cloth made in the regency, principally at Jerba, is thin, resembling soft serge. Morocco leather is made in considerable quantities, and dyed skins are articles of extensive export. Though cochineal is used in dyeing, and the prickly pear grows most luxuriantly in Tunis, no attempts have yet been made to introduce the insect into the country.

Trade.—None of the Barbary states is so well situated as Tunis for an extensive commerce, particularly with Europe. Three caravans come annually from the interior of Africa, bringing slaves, senna, ostrich feathers, gold-dust, gum and ivory, and take back woollen cloths, muslin, linen and silk fabrics, red leather, spices, fire-arms and gunpowder. Other caravans come from Constantinople with virgin wax, dried skins, cattle and sheep, which they exchange for cloth, muslin, Tunis mantles, linen, raw and manufactured silks, colonial produce and essences.

The subjoined table shows the total value of the imports of British produce and manufactures in the years 1862 and 1863:—

| Imports from the United Kingdom | 1862 | 1863 |
|---------------------------------|-------|---------|
| Coals, Cinders, and Culm . . . | £ 614 | £ 1,156 |
| Iron, Wrought and Unwrought | 744 | 3,768 |
| Total | 1,358 | 4,924 |

The exports from Tunis to the United Kingdom, in the same two years, were as follows:—

| Exports to the United Kingdom | 1862 | 1863 |
|-------------------------------|-------|--------|
| | £ | £ |
| Bones for Manure | 1,267 | — |
| Wool, Sheep or Lambs | — | 9,744 |
| All other Articles | 265 | 540 |
| Total | 1,532 | 10,314 |

It will be seen that the amount of trade of Tunis with the United Kingdom is very insignificant. The general imports are woollen goods, from France and England; cottons and linens, from the latter and Germany, with coffee, spices, sugar, tin, lead and iron, silk, wool, and wine. The government monopolises the trade in many articles, as tobacco, wax, wool and provisions, which it farms out to various individuals.

The government is in the hands of a *bey*, who rules with despotic power: he receives the caftan, with the dignity of a pacha of three tails, from the sultan, but is not otherwise in any way dependent on Turkey. The divan is composed of 37 mems., each of whom has a vote in council; but this body has only a nominal authority. The revenues of the bey have been estimated at 24,000,000 piastres, or upwards of 1,500,000*l.* a year; though at present that derived from regular sources is supposed not to exceed one-fourth part of this sum. Its principal sources are the customs, which are farmed every year to the highest bidder; the tithes upon the cultivation of olives, corn, and other products; the sale of permits for the exportation of necessaries and the importation of wines and spirits, usury taxes, the bey's domains, the sale of government offices, a poll-tax on the Jews, the traffic in slaves, and private mercantile speculations of the bey, occasional extortions from the wealthy, and the property of those who die without heirs, of which the exchequer takes forcible possession.

The armed force consists of nearly 50,000 men; but of these 40,000 compose the contingents (chiefly cavalry) furnished by the different Arab tribes, and the standing army comprises only about 6,000 men. The regular infantry, a body of 2,000 men, were originally organised by a French officer in 1831. There are 3,000 Turkish infantry, 2,000 spahis, or paid cavalry, 300 Mamelukes, forming a body-guard, and 16 pieces of artillery. The naval force now consists of only a corvette, a few brigs and schooners, and about 30 gun-boats; and Tunis is no longer formidable for piratical expeditions. By a treaty with France in 1830, piracy and Christian slavery were wholly abolished, and the people, their manners and customs, are similar to those of Algiers.

This region, which in antiquity was the centre of the Carthaginian dominions, remained in the possession of the Romans from the destruction of Carthage to the beginning of the fifth century, when the Vandals settled themselves in Africa. In 690 it became subject to the caliphs, and, after belonging to several successive dynasties, was conquered by Barbarossa in 1534. The emperor Charles V., in 1537, took Tunis, and restored the dethroned Muley Hassan; but, in 1570, the country was taken anew by the Turks, and it has only regained independence by the gradual decline of their empire.

TUNIS (an. *Tunes*), a marit. city of N. Africa, cap. of the above regency, on the W. side of the Gulf of Tunis, being separated from it by a large salt-water lake or lagoon, about 4 m. W. from the sea, and 3 m. SW. from the ruins of the ancient

Carthage; lat. 36° 47' 59" N., long. 10° 11' E. Its pop., which is greater, perhaps, than that of any other African city, Cairo excepted, has been estimated at from 100,000 to 150,000, of whom perhaps, 30,000 are Jews and 2,000 Christians. It stands on the edge of the lagoon, upon rising ground, backed on the W. by heights, which are crowned by the *kasbah*, or citadel. The town is inclosed by a wall of earth and stone, and a second wall surrounds its 3 suburbs, the outer wall being about 5 m. in circ. Towards the N. it is defended by 2 castles, and other heights around it on the S. and E. are protected by detached forts; but, notwithstanding the sums laid out on its defence, it is not a well fortified or strong town, and has been repeatedly taken. The houses, though of stone, are mean and poor, and the streets narrow unpaved, and filthy: the bazaars, which are superior to those of Algiers, are vaulted overhead, and sometimes furnished with foot-ways. There are a great number of mosques, several of which are handsome, and one was converted into a Catholic cathedral during the Spanish occupation. The palace built by a late bey, in which Queen Caroline lodged during her visit to Tunis, is a square edifice, magnificently decorated within. The rooms are paved with marble, and all open upon marble courts, with fountains in their centre. For about 10 ft. from the floor the walls of the rooms are lined with glazed tiles, and above this with stucco-work peculiar to the Moors; while the ceilings are traced in different-coloured patterns, with much taste. The great hall of justice has never been finished. In different parts of the city are five large barracks, also built by the late bey; and a very extensive edifice of the same description, fitted to accommodate 4,000 men, was built a few years ago. In digging the foundations of this edifice, two sarcophagi were found, and an ancient cistern of great extent, and in good preservation. The citadel, though large, is in a ruinous state, having but one efficient battery: in it is a gun-powder factory. Tunis has many gates, one of which, called the *Bab-Kartajinah*, or Carthage-gate, has in its vicinity the Protestant burial-ground. It has also a Rom. Cath. convent, church and chapel, a Greek church, an English consulate, and a theatre, at which Italian operas and comedies are performed 3 or 4 times a week. About 1½ m. W. from the city is the Bardo, or summer palace of the bey. It resembles a little fortified town, and has a pop. of at least 4,000 persons, employed in some way or other about the court.

The Gulf of Tunis opens to the N., in the form of a horseshoe; it is 16 m. deep, and has good anchorage all over in from 4 to 10 fathoms water. The N. and NE. gales sometimes throw in a heavy sea, which, however, seldom occasion any damage. The port is at the Goletta, or channel, passing through the narrow belt of land separating the lagoon of Tunis from the sea. There is at all times about 15 ft. water in the canal, and ships may use it on paying a fee of 3 dollars a day. It is not, however, much resorted to, all vessels of considerable burden loading and unloading from their moorings in the bay, by means of lighters. The Goletta is pretty strongly fortified, though commanded by a hill to the N. A harbour light, 40 ft. in height, was erected at the entrance to the canal in 1819. A great number of boats are employed in conveying goods and passengers across the lagoon, between the port and the city.

The lagoon of Tunis was formerly, as Procopius states, a deep port, with water sufficient to float large ships. But now, from its being the receptacle of the filth conveyed to it by the common sewers of the city, and other causes, its greatest

depth does not exceed 6 or 7 ft.; while round the shores it is comparatively shallow. An island in its centre, opposite the city, is defended by a fort. It does not receive any rivulet, and its loss by evaporation is supplied by a current which sets into it through the Goletta.

Accounts are kept in piastres (worth about 1s. 1d.) of 16 carobas, or 52 aspers each. The Tunis lb. of 16 oz. = 7.773 grs.: the principal commercial weight is the cantaro of 100 lb. = 111 lb. avoird. The *cafiz*, for corn, = $14\frac{1}{2}$ imp. bushels; the *muttar*, for oil, = about 5 galls. The *pie* varies from 18 to 26 in.

According to Strabo, *Tunes* existed before the foundation of Carthage. The chief events in its history are its numerous sieges and captures. Louis IX. of France died before its walls in 1270; and it was taken by the emperor Charles V., who defeated Barbarossa under its walls, in 1535. On this occasion about 20,000 Christian slaves were freed from bondage; but, unfortunately, 30,000 Moslem inhabitants of the city were put to the sword, despite the efforts of the emperor to prevent it, by the victorious troops, while 10,000 more were carried away, and sold as slaves.

TURCOING, or TOURCOING, a town of France, dep. du Nord, cap. two cantons, immediately adjoining the Belgian frontier, 10 m. NE. Lille, on the railway from Lille to Courtray. Pop. 33,498 in 1861. The town is regularly laid out, and pretty well built: the town hall in the great square, two churches, a college, a charitable asylum, and the remains of an old feudal castle, are its most conspicuous objects. The inhab. share in the manufactures common to Lisle and Roubaix, and their condition has been noticed in the article on the latter. Tourcoing has fewer looms than Roubaix; the articles woven are chiefly coarse cotton goods and linens. The weavers gain 9 or 10 francs gross per week; the other working classes (adult males) get from $1\frac{3}{4}$ to $2\frac{1}{4}$ fr. a day. The weavers are the most moral class in the town; they attend to the education of their children, and seem contented with their condition.

TURIN (Ital. *Torino*, an. *Augusta Taurinorum*), a city of N. Italy, the cap. of the prov. of same name, near the Po, where it is joined by the Dora, 80 m. WSW. Milan, on the railway from Genoa to the Mont Cenis. Pop. 179,635 in 1861. The city is of an oval shape, and about 4 m. in circuit: it was formerly fortified, but is now open, standing in a rich, well watered, and well cultivated plain: it is approached by four fine roads shaded with forest trees; the surrounding hills being covered with handsome edifices, among which the church of La Superga is pre-eminent. The impressions which Turin produces on the traveller are very much governed by the circumstance of its being the *first* or the *last* city he visits in his progress through Italy. Mr. Woods, an English traveller (author of 'Letters of an Architect'), who had already seen the best productions of architecture, states that being built on a flat, Turin makes no show at a distance; the domes and towers are neither numerous nor lofty, and on looking down on the city from the neighbouring hills, the dingy red tile roofs have a disagreeable appearance. But another traveller, Mr. Forsyth, a severe as well as an excellent judge, says that Turin is admired for the regularity of its plan, the cleanness of its streets, the symmetry of its squares, the splendour of its hotels, and the general elegance of its houses; and adds, 'Turin forms a perfect contrast with all the cities we have been accustomed to see in Italy: it is new, fresh, and regular, instead of antique and in decay; and the buildings, all

in detail, the materials being only brick coated over in imitation of stone. A profusion of running water keeps the fine wide pavement clean. All round the town, ancient trees of luxuriant growth oppose their impenetrable shade to the intolerable heat of the sun, and the views of the Alps are magnificent.' On the whole, it may be said that, were it not for the taste for meretricious ornament, which is offensively prevalent everywhere in Turin, it would be one of the finest cities of Europe. It has but few modern works of art, and little to interest the antiquary; and there is scarcely any thing to characterise it as an Italian city: to most travellers it has appeared rather like a new and handsome French town.

Except in the old town, which forms about one-sixth part of the whole, the streets, which are bordered by houses four or five stories high, are straight, and cross each other at right angles; and here, as in the new town of Edinburgh, and the NW. and other parts of London, entire rows and streets of considerable extent are of precisely similar architecture. The royal palace stands in the centre of the town, in the Piazza Reale or di Castello, a very large and elegant square, surrounded by many other public buildings, and having in its centre the former palace of the Dukes of Savoy, a castellated mansion environed by a moat. The Strada del Po, a noble street, $\frac{1}{2}$ m. in length, leads to this square from the river, which is here crossed by a fine stone bridge of five arches, erected by the French; but which is said to be surpassed by a new bridge over the Dora recently completed. The Strada di Po, like the Strada Nuova and di Dora Grande, the Piazza Reale, and S. Carlo, is embellished in its whole length with arcades over the footways, which give a most agreeable and imposing appearance to these parts of the city. The royal palace is little remarkable in its architecture, but it has some spacious and richly adorned apartments, and a good collection of paintings, including many of the Flemish school, and others by Titian, Guercino, Albani, and Murillo. In this edifice is the equestrian statue of Amadeus I., the figure in bronze, the horse in marble. Attached to the palace are gardens open to the public, the fashionable resort during day; the Ronde, between the city and the Po, and Valentino grounds being the favourite resorts in the evening. The old palace of the dukes of Savoy is a singular building, with four fronts of different architecture. Three of these derive comparative ugliness from the beauty of the fourth. This last front, composed of one Corinthian peristyle raised on a plain basement, is the noblest elevation in Turin, where it holds the post of honour. The private palaces would strike a stranger who had just crossed the Alps as very magnificent, but there are many in Italy equally large and in a much purer taste. That of Prince Carignano has a remarkable staircase by Guarini, who, along with Guivarra, has been the architect of most of the principal edifices in Turin.

The cathedral, a Gothic structure, built about the end of the 15th century, has been praised for the richness of its appearance, particularly the W. front, which is ornamented with well-executed bas-reliefs. In it is the chapel of the *Santo Sinode*, in which the winding-sheet of our Saviour is preserved with all the attention due to so important a relic. This cathedral was formerly among the wealthiest churches in Italy; but its plate has been sold, and the produce applied for the most part to secular purposes. In fact, the riches of this cathedral, its images, vases, and candlesticks defrayed the cost of erecting the bridge across the

Turkey in Europe & Greece / Area 208,000 Sq. Miles /

Length 600 Miles

England & Wales / Area nearly 58,000 Sq. Miles / Length 365 Miles



as of improving the **Tuileries** and building the **Rue de Rivoli** in the French capital.

The churches of **San Filippo**, **San Christina**, and many others are richly adorned; but they all yield the palm to **La Superga**, situated on a hill about 5 m. from Turin. It was on this spot that the Duke of Savoy (**Victor Amadeus**) and Prince Eugene met to concert their plans for the attack of the French, and the deliverance of the city in 1706; and the church was constructed by the duke as a monument of his gratitude to the God of battles for having given a signal victory to his arms. The edifice is not unworthy its origin. It is of a circular form, and surmounted by a dome. All the columns in this building are of marble of different colours, and give the edifice an appearance unusually rich and stately. Instead of pictures, the altars are decorated with bas-reliefs; the pavement is of variegated marble; in short, all the different parts of the building, and even the details of execution, are on a scale of magnificence.

The university of Turin was founded in 1405. It consists of 5 faculties, or colleges, consisting of theology, with 4 professors; law, with 5 do.; medicine, with 6 do.; surgery, with 5 do.; and the arts, with 22. It is usually attended by about 1,200 students, who board out in private families. Its library is said to have 112,000 vols. Its buildings are extensive and well arranged; the court is surrounded with a double tier of porticoes, under which is a collection of ancient sculptures, bas-reliefs, &c., from the excavated Roman city of *Industria*, about 18 m. distant. In the museum of the Academy of Sciences is the valuable collection of Egyptian antiquities, formed by **Drovetti**, and purchased by the king of Sardinia for 400,000 fr. It comprises several colossal statues of Egyptian sovereigns, domestic and agricultural implements, papyri, and the famous **Isiac table**. Under the same roof are museums of natural history, anatomy, and medals, and the royal library, comprising an extensive and valuable collection of historical and other works, including an extensive series of Bibles.

The citadel of Turin is a regular pentagon, planned by **Urbino** in the 16th century; it has extensive subterranean galleries, and is still of considerable strength. The gates of the city, which were cased with marble, were demolished by the French, and the ramparts dismantled and converted into public walks. The **Valentino** palace, and the other royal seats around the city, are now either deserted or appropriated to schools and museums; these, with 9 hospitals, 2 asylums, the colleges of the **Jesuits** and **Ignorantelli**, an arsenal, with a school of military engineering, a grand opera-house, ranking as the 3rd theatre in Italy; 2 smaller theatres, the cemetery of the aristocracy, observatory, botanic garden, royal academy of painting, and *monte di pietà*, comprise the other establishments worth notice. Turin is the seat of a tribunal of primary jurisdiction, an archbishop's see, and has chambers of agriculture and commerce. Its manufactures consist chiefly of silk fabrics and twist; but it has others of woollen and cotton goods, hardware, arms, paper, glass, earthenware, and liqueurs, and its printing business is pretty extensive. The shops and hotels of the city are good, but the supply of water is bad and the prevalence of fogs render it rather an unpleasant residence in autumn and winter. The manners, habits, and language of the inhabitants are more French than Italian.

Turin was made a military station by **Julius Cæsar** on his invasion of Gaul. In 312 **Constantine** gained in its vicinity a great victory over **Maxentius**. **Charlemagne** annexed this city to

the marquisate of **Susa**: it came into the possession of the dukes of Savoy in 1032; and became their cap. in 1281. It was taken by **Francis I.** in 1536, and held for 26 years by the French, who again took it in 1640. But the most celebrated by far of the sieges of Turin took place in 1706, when it was invested by a powerful French army. **Voltaire** has described the immense preparations made for this siege (*Siècle de Louis XIV.*, cap. 20); but the incapacity and disagreement of the French generals, and the talents of Prince Eugene and the Duke of Savoy, secured for the latter an easy and complete victory. All the vast stores accumulated by the French fell into the hands of the conquerors, and the besieging army was wholly dispersed. Under the French ascendancy, from 1800 to 1814, Turin was the cap. of the *dép.* of the Po. After the peace of Vienna it became once more the capital of the kings of Sardinia, and on the latter gaining the crown of Italy, Turin, for a short while, was looked upon as the capital of the new kingdom. But it lost this advantage in the spring of 1865, by the removal of the court, the two houses of parliament, and all the higher government functionaries to Florence.

TURKEY, or the **OTTOMAN EMPIRE**, a very extensive country, partly in SE. Europe, and partly in W. Asia, comprising some of the most celebrated, best situated, and naturally finest provinces of the continents to which they belong. The limits of the Turkish empire are not easily defined; inasmuch as it is usually represented as including several extensive countries, which are substantially independent. **Moldavia** and **Wallachia**, and **Servia**, in European Turkey, are now connected with the Porte only by the slenderest ties; though, as some of their fortresses are garrisoned by Ottoman troops, and as they continue to pay tribute to the Porte, they may still be properly included within the wide range of the Turkish dominions. **Egypt**, however, and the other African territories that formerly belonged to the Porte, may now be considered as being but nominally connected with the Ottoman empire.

Very different estimates have been formed of the extent and pop. of this great country, and neither is known with any thing approaching to precision. According to the most reliable estimate, the total area of the empire, including the tributary provinces, comprises 1,836,478 sq. m., and the extent and population of the several grand divisions in Europe, Asia, and Africa are as follow:—

| Divisions | Area in sq. m. | Population | Pop. to sq. m. |
|------------------|-------------------|------------|-------------------|
| Turkey in Europe | 203,628 | 15,500,000 | 76.1 |
| Turkey in Asia | 673,746 | 16,050,000 | 23.8 |
| Turkey in Africa | 959,104 | 3,800,000 | 3.9 |
| Total | 1,836,478 | 35,350,000 | 19.2 |

Physical Geography.—The high table-land anciently called *Mæsa Superior*, extending between **Siphia** and **Pristina**, and dividing the basin of the **Morava** on the N. from those of the **Vardar** and **Struma** on the S., and of the **Lower Danube** on the E., forms the central nucleus of the Turkish mountains. From this centre branches pass off northward, bounding **Servia** on the W. and E.; on the E. the **Balkan** chain (an. *Hæmus*) stretches in a nearly straight line from the sources of the **Isker** to the S. of **Sophia**, E. to the **Black Sea**, a distance about 250 m.; dividing **Bulgaria** from **Roumelia**, and the waters that flow into the **Lower Danube** on the N. from those that flow into the **Maritza** on the S. The **Despoto-Dagh**

(an. *Rhodope*), and the mountain chains that run through Macedonia, branch off from the central nucleus on the S.; while on the W. it gives off various chains that unite with the true Alpine chains, which ramify through Croatia, Bosnia, Herzegovina, Montenegro, and Albania. Nearly in a direct line S. from Pristina runs a chain which divides Albania from Macedonia, and thence extending into Thessaly and Greece under the name of Pindus, separates the waters flowing into the *Ægean* from those flowing into the Adriatic and Ionian Seas. The interposition of those mountain chains frequently renders the communication between contiguous provinces rare and difficult. But with the exception of a few heights, as Mount Scardus, nearly 10,000 ft. in elevation, and Scornus and Pindus, near Mezzovo (about 9,000 ft.), the Turkish mountains seldom reach an altitude of 8,000 ft. Mount Dinara, whence the Dinaric Alps derive their name, is only 7,458 ft. in height; the Albanian mountains are generally under 7,700 ft.; Mount Athos is 6,778 ft. and Mount Menikon (an. *Cercina*), the loftiest of the Balkhan chain, 6,395 ft. in height. The Balkhan has acquired a greater degree of interest than most of the other chains, from its being supposed to form an all but insurmountable barrier to an invading army. This, however, does not appear to be really the case. The W. portion of the Balkhan is seldom more than 4,000 ft., and its more easterly portion, near the Black Sea, not more than from 1,800 to 2,000 ft. in height, while it is traversed by half a dozen different passes, none of which is fortified. Hardly one of those appears, in fact, to present any very formidable obstacle to an invading army. There are more lines of communication for carriages across the Balkhan, between Thrace and Bulgaria, than between any of the other Turkish provs.

European Turkey has numerous narrow valleys, and some very extensive plains. By far the largest of the latter is that of Wallachia, Moldavia, and Bulgaria, traversed in its centre by the Lower Danube, and ranking at least as the third, if not the second, of the great plains of Europe. A considerable portion of Thrace, and some parts of Macedonia, are level, and Thessaly principally consists of a very fertile basin. Almost every part of the country is well watered; and, besides the Danube and Save (which last constitutes a great part of its N. boundary), Turkey has several rivers of very considerable size. Among those on the N. side of the great central plateau and its ramifications, affluents of the Save and Danube, are the Unna, Verbaa, Bosna, Drin, Morava, Timok, Schyl, Isker, Aluta, Jalomnitz, Sereth, and Pruth. Among the rivers to the S. of the central plateau, the following may be specified, viz. the Maritza (an. *Hebrus*), which has its sources in the NW. angle of Roumelia, in the Balkhan and Despotodagh mountains, and flows generally E. or SE. to the centre of Thrace, near Adrianople, where it receives the Tondja (the *Tonzus* of Ptolemy), and thence S. or SW. to the *Ægean*, which it enters close to the Gulf of Enos, after a course of about 240 m. Its greatest width is about 11 furlongs. Adrianople, Philippolis, Demotica, and Ipsala (an. *Cypsela*), are on its banks, which, in many parts, are covered with forests of oak and elm. The Maritza is navigable from the time of the autumnal rains till May, as far as Adrianople, for boats of 200 tons; but, during the summer months, sea craft ascend only as high as Demotica. The Kara-su (*Nestus*), Struma (*Strymon*), and Vardar (*Axius*), which traverse Macedonia in a SE. direction, are all of considerable size, but generally shallow and unfit for navigation. The Sclambria

(*Peneus*) rises near Mezzovo, and drains the basin of Thessaly, falling into the Gulf of Salonica at the mouth of the famous défilé and vale of Tempe. The principal rivers flowing into the Adriatic are the Narenta, in Herzegovina, and the Drin and Vojutza (*Aous*), in Albania.

European Turkey has no lakes of any very great extent. The principal are those of Ochrida (*Palus Lychnitis*), about 20 m. in length by 8 m. in breadth, Scutari (*Palus Labeatus*) and Yanina, in Albania: there are numerous small lakes in Macedonia and Thessaly.

The physical geography of Asiatic Turkey requires but a brief notice, having been already treated of in the arts. NATOLIA, KURDISTAN, and SYRIA. Asia Minor consists chiefly of an extensive table-land, traversed by many parallel mountain ranges from W. to E., extending into Armenia and Kurdistan. This table-land appears generally to increase in height eastward; Mount Ida, overlooking the Plain of Troy, being only about 5,000 ft., while Mount Bisutum, the culminating point of N. Kurdistan, is 12,000 ft. above the sea. From this lofty plateau several mountain ranges are given off to the S., inclosing the basins of the Euphrates, Tigris, Jordan, and Orontes, which, with the Halys (see NATOLIA), Sangarius, and Araxes, are the principal rivers in this part of the empire. The largest lake is that of Van, next to which are the Dead Sea and Lake of Tiberias, in Palestine: many small lakes exist in Natolia. The N. part of Asiatic Turkey is mountainous, the surface declining towards the S., where it spreads out into extensive plains (an. *Chaldea*, *Mesopotamia*, and *E. Syria*), of much natural fertility, but at present for the most part desert and uninhabited.

The coasts of Turkey, both in Europe and Asia, are in general bold and rocky. In many parts they present a long and tolerably uniform line, with few gulfs or harbours of any magnitude. This is particularly the case with the coasts of the Black Sea, Syria, and a part of Albania. But the shores of the *Ægean* and the adjacent seas are deeply indented with numerous bays and inlets, and present many good harbours, as those of Smyrna, Salonica, and Constantinople. Varna is the only good Turkish port on the Black Sea. Durazzo (the an. *Dyracchium*), on the Albanian shore, might easily be rendered an admirable port, but at present there is not a single safe or convenient harbour along the whole W. coast of European Turkey.

The geology of the two great portions of the Ottoman empire presents considerable differences. The great mountain chains of Europe consist of granite, gneiss, trachyte, syenite, serpentine, talc, mica, and clay-slate, and many other primary and transition rocks, inclosed between beds of sandstone or limestone, the latter being the most prevalent formation in the alpine ranges of the W. provs. and in Thrace. This latter prov., with Bulgaria, consists, in great part, of shelly limestone, marly clay, and other tertiary formations. Iron and other metallic ores are found in great abundance; but volcanic formations appear to be scarcer in Europe than in Asia. In Asia Minor the whole range of mountains, from sea to sea, is limestone. Volcanic rocks are frequently found, and granite rises up occasionally. The mountains abound in veins of copper and lead, the last being rich in silver. Mineral springs frequently occur; most of them hot. As the country rises towards the E., granite and the other primary rocks become more prevalent. The lower basins of the Euphrates, the Danube, and other large rivers, are mostly alluvial.

Climate and Natural Products.—In a region extending through nearly 20 degs. of lat. and more than 30 degs. of long., having every variety of elevation, exposure, soil and subsoil, there must necessarily be the greatest variation of climate. The climate of European Turkey is much colder than that of the parts of Italy and Spain under the same latitudes, and is so very changeable that, at Constantinople, Fahrenheit's thermometer is said sometimes to fall 31° within an hour. In the Danubian provinces snow lies several feet deep, on the higher mountains, for six months together; the thermometer frequently stands between 10° and zero, and in Moldavia it has been known to descend to 15° below zero. On the other hand, the summer heats are oppressive, and, even in the N., the grape ripens by the end of July. The temperature and salubrity of Asiatic Turkey is almost equally variable with that of European Turkey. In the highlands of Armenia, even the plaigs are covered with snow as late as May, and the fine season, properly so called, does not comprise more than four months of the year, during which period both sowing and reaping are completed. Asia Minor has but two seasons, the transition between them being scarcely perceptible. In winter, while the uplands are covered with snow, the lowland plains and valleys are visited by perpetual rains and N. winds. During summer there is scarcely any rain, but the soil is fertilised by heavy night-dews. Caramania suffers from arid winds: and, in the delta of the Euphrates and Tigris, the barometer often rises to 40°. The climate of Syria and Mesopotamia has been already noticed in the arts. SYRIA, BAGDAD, and BUSSORAH.

The best indication of the relative temperature of different parts of Turkey is afforded by their vegetable products. In Croatia, Bosnia, and the adjoining provinces, the mountains are covered with forests of oak and elm; S. of the Balkan the country is covered with forests of sycamore, carob, and plane trees; gardens of roses, jasmine, and lilac; vineyards and orchards of nearly all kinds of fruit-trees; but is destitute of the olive, which, except in some particularly favourable situations, does not thrive N. of lat. 40°. The flora of Albania is similar to that of the opposite coast of Italy; and, in Thessaly, the garden of European Turkey, oil, wine, cotton, tobacco, figs, citrons, pomegranates, oranges, and lemons grow to perfection. The same fruits and other products flourish in the more sheltered parts of Asia Minor, even on the shores of the Euxine, where, however, owing to the severity of the N. winds, among

other causes, the forests seldom extend up the mountains above 5,000 ft. In Armenia and Koor-distan, the olive and orange ripen only in the warmer valleys, and we find on the high grounds much of the vegetation that prevails in the mountainous provs. on the Danube and Save. S. of Taurus there is an entirely new region, where the date palm, oriental plane, Babylonian willow, banana, pistachio, sugar-cane, and indigo betoken a close approach to the vegetation of tropical climates.

The forests of European Turkey are infested by bears, wolves, and jackals, to which, in parts of Asia, may be added the lion and tiger. The gazelle, and deer of various kinds, hares, and other kinds of game, are very abundant. The great bare-necked vulture inhabits the ranges of Taurus, and the ostrich wanders over the sandy deserts of the south. The camel, a native of this region, is the chief beast of burden throughout the greater part of Asiatic Turkey.

Population.—The total population, estimated according to a rough enumeration taken in 1844 at 35,350,000, is distributed as follows, in the different divisions of the empire:—

| TURKEY IN EUROPE. | |
|---|------------|
| Thrace | 1,800,000 |
| Bulgaria | 3,000,000 |
| Roumelia and Thessaly | 2,700,000 |
| Albania | 1,200,000 |
| Bosnia and the Herzegovina | 1,100,000 |
| The Islands | 700,000 |
| Moldavia | 1,400,000 |
| Wallachia | 2,800,000 |
| Servia | 1,000,000 |
| | <hr/> |
| | 15,500,000 |
| TURKEY IN ASIA. | |
| Asia Minor, or Anatolia | 10,700,000 |
| Syria, Mesopotamia, and Kurdistan | 4,450,000 |
| Arabia | 900,000 |
| | <hr/> |
| | 16,050,000 |
| TURKEY IN AFRICA. | |
| Egypt | 2,000,000 |
| Tripoli, Fez, and Tunis | 1,800,000 |
| | <hr/> |
| | 3,800,000 |
| Total | <hr/> |
| | 35,350,000 |

The above estimates are higher than those given by other statistical writers. Subjoined are the statements, placed side by side, of two statistical authorities (Mr. David Urquhart, 'Turkey and its Resources,' and M. Ami Boué, 'La Turquie en Europe') relating to the population of Turkey in Europe.

TURKEY IN EUROPE.

| | Pop. according to Urquhart | | Pop. according to Boué |
|---|----------------------------|---|------------------------|
| Wallachians and Moldavians | 1,500,000 | Wallachia, 1839 | 2,402,027 |
| Osmanlis | 700,000 | Moldavia, 1838 | 1,419,105 |
| Greeks (Hellenic race and language, all Christians) | 1,180,000 | Servians | 886,000 |
| Albanians (Skipertar race and language, two-thirds Mahometans) | 1,600,000 | Muslimans in Servia | 10,400 |
| Tribes of Slavonic race and language | | Bosniacs | 700,000 |
| Bosniacs, Tulemans, Pomac, one-third Mahometans; the rest (Servians, Bulgarians) Christians of the Greek and (Myrdites, Croatsians) of the Latin Church | 6,000,000 | Herzegovinians | 300,000 |
| Valachi Greek Church | 600,000 | Croats | 200,000 |
| Gipsies | 200,000 | Montenegrins | 100,000 |
| Jews | 250,050 | Bulgarians | 4,500,000 |
| Armenians | 100,000 | Albanians | 1,600,000 |
| Franks, &c. | 50,000 | Greeks | 900,000 |
| | | Zinzars (Wallachians of Pindus) | 300,000 |
| | | Turks | 700,000 |
| | | Armenians | 100,000 |
| | | Jews | 250,000 |
| | | Gipsies | 150,000 |
| | | Franks, &c. | 60,000 |
| Total | <hr/> | Total | <hr/> |
| | 12,180,000 | | 14,577,532 |

The first of these authorities may be held the most reliable, the statements being based more or less on official information. The sum total of the European population of Turkey seems, however, under the mark.

The various races of which the population of the empire in Europe, Asia, and Africa is composed are thus classified :—

| Races | Europe | In Asia | In Africa |
|-----------------------|------------|------------|-----------|
| Ottomans | 2,100,000 | 10,700,000 | |
| Greeks | 1,000,000 | 1,000,000 | |
| Armenians | 400,000 | 2,000,000 | |
| Jews | 70,000 | 80,000 | |
| Slaves or Slavonians | 6,200,000 | — | |
| Roumains | 4,000,000 | — | |
| Albanians | 1,500,000 | — | |
| Tartars | 16,000 | 20,000 | |
| Arabs | — | 885,000 | 3,800,000 |
| Syrians and Chaldeans | — | 200,000 | |
| Druses | — | 80,000 | |
| Kurds | — | 100,000 | |
| Turkomans | — | 85,000 | |
| Gipsies | 214,000 | — | |
| Total | 15,500,000 | 16,050,000 | 3,800,000 |

The Turks or Osmanlis who have, for more than four centuries, been the dominant race, were originally of Scythian or Tartar extraction. But the Turkish blood has been largely intermixed with the Mongolian and Persian; and, in Europe, the higher class of Turks have generally furnished their harems with the finest women of Circassia and Georgia; while the inferior Turks have allied themselves with Servians, Albanians, Bulgarians, and Greeks. In consequence the original and distinguishing features of the race are now, in Europe at least, very much obliterated, and the Turkish, from being one of the ugliest of Asiatic nations, is become, speaking generally, one of the handsomest; though, from the peculiar mode in which the race is maintained, there is necessarily the greatest variety in their stature and appearance. Turkish ladies have, in general, very white delicate complexions, a consequence of their sedentary mode of life, and of their habit of veiling themselves when they take the air. Their mode of life, and their great addiction to the bath, render them rather disposed to *embonpoint*; but it is absurd to allege that this constitutes the *ne plus ultra* of a Mussulman's idea of beauty. Had such been the case, the Circassians and Georgians would not have constituted the pride of the harem.

The national character and dispositions of the Turks have changed as well as their physical constitution, but in a less degree. They are now, as of old, phlegmatic, proud, and sensual. Their pride is a consequence of their ignorance, and of the recollection of their former victories and conquests; and their sensuality is in part, at least, a consequence of the peculiar nature of the Mohammedan paradise, and of their wish to realise in this world some portion of that felicity which is to be the portion of all true believers in the next. Other nations have affected to believe in the doctrine of predestination, but in this respect the Turks alone have given a practical effect to their speculative tenets; and their stationary state and long continued contempt for the inventions and discoveries of others may be, in no small degree, ascribed to their conviction of their inutility, arising from their belief that every thing that occurs is determined by an overruling Providence, against whose decisions it would be alike vain and impious to contend. Speaking generally, the Turk is hos-

pitabile, true to his word, sincere, and honourable in his dealings, contrasting in this respect most advantageously with the Greeks and others of the subjugated races, among whom hypocrisy and bad faith, the result probably of their degraded condition, are extremely prevalent. The Turk is not prone to anger, nor liable to sudden gusts of passion; but when provoked his fury has no limits, and he becomes brutal and ferocious in the extreme, involving the innocent and the guilty in one common ruin. His religion interdicts the use of wine; and, though not always respected, this precept has, on the whole, had a salutary influence on his conduct. Though capable, on emergencies, of great and vigorous exertion, laziness and apathy are distinguishing characteristics of the Turks. There is nothing in which they take so much delight as in reclining in the shade from sunrise to sunset, apparently in a state of total indifference, occasionally sipping coffee and inhaling the fumes of tobacco. Whatever may be their object, they saunter through the streets with the same measured and monotonous step. They converse little, and the presumption is that their mind is as indolent as their body.

Perhaps no nation ever possessed so little talent for governing others as the Turks. They have never struck their roots, or acquired any solid footing, in the countries they have conquered. They are encamped in and occupy them; but they hold them by no tie other than the sword. They have never coalesced with the original inhabs.; they look upon themselves as the nation, and the rest of the people, or those at least who have not embraced Mohammedanism, as an inferior race, which it is, if not a duty, at all events but a venial offence, to insult and trample upon. In this respect they differ widely from the Tartars who overran China, and indeed from every other people; and to this, more than any thing else, their weakness, and the wretched state of the countries subject to their dominion, are to be ascribed. The more important features in the constitution and character of the other great races inhabiting the Turkish empire will be found noticed under the articles ARABIA, ARMENIA, BULGARIA, GREECE, SERBIA, SYRIA, and WALLACHIA.

Property.—There is, in many respects, a considerable similarity between the mode in which property has been distributed in Turkey, and that in which it was distributed in Europe during the middle ages. In both cases, in making this distribution, the establishment and support of a militia, who should be bound to repair, at their own expense, to the standard of the sovereign, and to follow him in his campaigns, was a principal object. But the support of the national religion and the subsistence of the subjugated population had also to be provided for. Hence, when the Turkish sovereigns made any new conquest, the lands were usually divided into three portions; one of these was appropriated to religious and charitable purposes, that is, to the support of mosques, schools, and hospitals: another portion was distributed as private property to the conquerors and the conquered; the former paying a tithe of the produce to the state as paramount landlord, while the latter, if they were not Mohammedans, were subjected to a land-tax, or *impôt foncier*, and, also, to a *kharadj*, that is, to a personal tribute, or capitation-tax proportioned to their means; the third and last portion, which was usually the largest, and might be called the crown lands, was divided into estates, whereof some were the peculiar property of the sultan, others of his mother and wives, and others of the treasury and

great officers of state. But the greater portion of the crown lands was divided into estates, called from their greater or less size *zaimets*, *timariots*, and *beyliks*, which the sultans assigned to the more deserving or most favoured of their followers. The latter, however, did not succeed to the hereditary or absolute property of these estates. On the contrary, they only held them during life or good behaviour; and whenever any vacancy occurred, whether by death or forfeiture, the sultan made a new appointment to the vacant fief; and instances have been known of the same lordship having been held by eight different masters in the course of a single campaign. But in the course of time most part of these estates, though not all, were assigned, like the fiefs in European countries, to the heirs male of the former proprietors, and thus became, in effect, hereditary. It should, however, be observed, that while the Turkish institutions were in their vigour, and the illegal exactions of proprietors and pachas restrained by the vigilance of the sultan, the interests of the *rayahs*, or peasantry on all sorts of estates, were carefully attended to, and their rights as well as their obligations defined and enforced. Hence, when a new lord had a *zaimet* or a *timariot* assigned to him, he could only demand of the tenants, in full of rent, a certain portion of the produce of their land and of the increase of their stock, or a certain amount of service, or *corvées*; and in consideration of this, he was not only bound to perform military service to the sultan, but also to protect the cultivators on his estate. This state of things contrasted most favourably with the rapine and anarchy that then prevailed in the greater part of Europe. 'I have seen,' says a contemporary of Solyman the Magnificent, 'multitudes of Hungarian rustics set fire to their cottages, and fly with their wives and children, their cattle and instruments of labour, to the Turkish territories, where they knew that, besides the payment of the tribute, they would be subject to no imposts or vexations.' (Leunclavius in Turc. Imp. Statu.)

Hammer has given a view of the principal institutions of the Ottoman empire, at the period of their greatest efficiency, at the death of Solyman the Magnificent, from which we beg to subjoin the following extract:—'D'après le Koran, la terre entière appartient à Dieu, qui la lègue à qui lui plaît; en sorte que toute propriété relevant originairement de Dieu appartient à l'imam (souverain), qui est son ombre sur la terre. Mais après la conquête d'un pays, l'imam aliène son droit de propriété en faveur des Musulmans à la charge de payer la dîme, ou bien des non Musulmans, à la charge d'être soumis à un impôt foncier et à un impôt sur les produits: les nouveaux possesseurs acquièrent ainsi sur ces biens un véritable droit de propriété transmissible de père en fils, avec la faculté de les vendre, de les partager ou de les consacrer à des fondations. Le prince a de semblables droits sur ses biens de famille et sur ses biens domaniaux (*kass*), dont il lui arrive souvent d'assigner les revenus à titre de traitement à de hauts fonctionnaires. Les domaines du pays, cédés comme fiefs en récompense de services militaires, ne jouissent pas de ces avantages; leurs possesseurs n'ont pas sur eux ce droit de propriété illimité, et ne peuvent les aliéner, les partager, ou en instituer des fondations. Les domaines se perpétuent à la vérité dans la ligne mâle des feudataires; mais, comme l'Etat seul en a la propriété, il est nécessaire qu'à la mort de chaque feudataire, ses fils reçoivent du prince un nouveau diplôme d'investiture. En Egypte, on donne le nom de fermes aux mêmes biens qui, dans l'Ana-

ceux qui sont concédés en récompense de services militaires; mais il y a une grande différence entre le feudataire et le fermier Egyptien. Ce dernier n'a ni les mêmes obligations ni les mêmes avantages que le premier; car, tandis que le feudataire propriétaire viager ne paie aucun impôt à l'Etat et reçoit de son paysan ou raya tous les revenus, le fermier au contraire paie à l'Etat un droit de fermage et partage avec le paysan le surplus des produits.' (Histoire de l'Empire Ottoman, vi. 268.)

According to the imperial survey ordered by Solyman, the number of *zaimets*, or estates, estimated at 500 acres of land and upwards, amounted to 3,192, and the number of *timars*, or estates valued at from 300 to 500 acres of land, amounted to 50,160; the whole furnishing a revenue of nearly 4,000,000 rix-dolls., appropriated to the maintenance of an army of about 150,000 men. At the end of the last century, it was computed that there were in the European part of the empire 914 *zaims*, and 8,356 *timars*; the number in Asia being nearly the same, and the whole furnishing a militia of above 60,000 men. In 1818, it would appear that there were still 914 *zaims* in Europe, and in Asia 1,479; the annual revenue from these amounting to from 25,000 to 100,000 aspers each, which, at 100 aspers to a Turkish piastre, would give a yearly income of about 50*l.* on an average from each; but more recently the numbers of both were still farther reduced. After the disorganisation of the empire, which began to be strongly manifested during the first half of last century, all sorts of abuses crept into the management of the estates held by the feudal lords or *spahis*. These were oppressed and plundered by the pachas; and they, in their turn, oppressed the cultivators, increased their demand for corvees or other services, and claimed and exacted, though illegally, a much greater portion of the produce than they were legally entitled to. And yet, despite their pillage of the cultivators, many *spahis* were, like the *zemindars* in Hindostan, forced to abandon their estates; and in many districts, especially in Asia Minor, owing partly to the illegal exactions of the lords, but still more to the arbitrary exactions of the pachas, the cultivators wholly deserted the lands, which are now quite unoccupied.

It was for a while a common opinion in Western Europe that Turkey was a country in which there was no security of property; and if this meant that it was exposed to illegal exactions of all kinds, partly by the feudal lords, and partly and principally by the pachas and their subordinate authorities, nothing could be more correct. But nothing, on the other hand, could be more incorrect than to allege, as many have done, that in Turkey private property is not recognised by law, or that it may be seized at the pleasure of the sultan. This, no doubt, has been the case with the property of persons in the public service, whose lives and fortunes have been made to answer for their real or imputed misconduct; and, in some degree, also, with the feudal estates, or those held by a military licence. But all other sorts of property have been respected in Turkey. And even a pacha, or other public functionary, who had acquired property by the most objectionable means, might, if he pleased, easily place it beyond the grasp of the grand seignior. To accomplish this, he had merely to settle it on his family and direct heirs, leaving the reversionary interest in it to some mosque, which, on receiving a nominal quitrent, took charge of the property, which could no longer be either forfeited or affected by the crimes or misconduct of the original founder of the family.

vacouf or *vakf*. But this device, though quite effectual for the object in view, tended, in the end, to accumulate much too great a quantity of property in the hands of the church; so that, in obviating one abuse, it occasioned another.

The reforms which have been introduced of late years have effected a great change in the law relating to property in Turkey, and also a considerable improvement in its administration. With the exception of those belonging to the mosques and charitable institutions, most part of the feudal or military estates (*spahiliks* or *beyliks*) and landed properties not strictly hereditary, have been resumed by government, and are now held during its pleasure. This proceeding involved very many instances of extreme hardship, and even injustice; but it has been carried out, in as far as was practicable, and was supposed to be necessary to the introduction of an improved system. The new proprietors very often consist of civil and military officers who reside in the towns, and who are thus to a considerable extent dependent on the government. They are not, like their predecessors, required to furnish troops to the state; the recruitment, pay, and maintenance of the latter being provided for by government. But, in lieu of this obligation, they are charged with the payment of a tithe or tenth of the produce, as the rent due to the state, or real owner of the land, and, also, with an income-tax. The vice of this system is that the landlords, not being absolute or even hereditary proprietors, have but little interest in the prosperity of the lands; and that the government is wholly unable, however good its intentions, to hinder them from making illegal demands on the peasantry or cultivators, a result which may be confidently expected, seeing that their revenue depends on the excess of the returns they receive over what they have to pay to the state. It is true, no doubt, that the new plan makes the superior lords exert themselves to protect the cultivators from the unjust exactions of the pachas and revenue officers. But this, also, was in some degree the case under the old system. On the whole it is evident that nothing would be half so likely to put down abuse, and to lay a solid foundation for future improvement, as the universal establishment of a right of private property in land.

When the new system was introduced, it was found that its application was greatly limited by the growth of the system of *vacouf*, and the immense extent of the lands held by the church, and, therefore, exempt from taxation. Yet, however great, this was an abuse with which, owing to the religious prejudices of the people, it was very difficult to deal. The government, however, are said to be determined on the sequestration of the church property.

Agriculture.—In Turkey the cultivators do not live dispersed over the country in hamlets, or in single farmhouses, but are congregated in villages, which, owing to the depopulation of most districts, are frequently at great distances from each other. These villages present a very striking picture of primeval manners, each family providing itself with most articles required for its consumption, while their municipal affairs, or those in which the community have an interest, are conducted by their elders. The village communities in certain districts, especially of European Turkey, enjoy considerable powers; and wherever this is the case, or where a tract of country happens to belong to a powerful individual, the cultivators, speaking generally, are comparatively prosperous. This, however, is the

Turkey is not dependent upon any foreign country for the subsistence of its inhabs.; it yields, on the contrary, corn and other produce, sufficient not only for the home demand but also for exportation. Ten times the produce might, however, be raised in these fine countries were a better policy adopted, and the inhabs. protected against vexatious exactions. The native rayahs or peasants, by whom cultivation is carried on, have generally little or no capital; and as the tax on the crop has generally to be paid before the produce is gathered, they are in most cases obliged to borrow the money for this purpose at a ruinous rate of interest. Agriculture is accordingly in a very backward state throughout most parts of the empire. In Thrace, the rotation of crops is tolerably well understood; but elsewhere in European Turkey cultivation is extremely depressed. Manuring is next to unknown, and in the mountainous parts, particularly in Servia and Albania, an immense waste of timber occurs, from the forests being burnt that the ground may be fertilised by their ashes. The ploughs (except in Wallachia and a few other provs.) are of the most wretched description, being seldom shod with iron, and fit only to scratch the surface of the earth; a bunch of thorns performs the functions of a harrow; and the other farming implements are in general equally bad. Thrashing is performed, as in most eastern countries, by treading out the grain with cattle; the straw being subsequently chopped by dragging over it a sort of heavy cylinder stuck with sharp flints. But the fertility of certain portions of the empire, as Thessaly and the valley of the Maritza, is so great, that despite the low state of husbandry, the average produce of corn is said to amount to from 15 to 30 times the seed.

Maize is the principal species of grain cultivated in European Turkey, in the mountain-valleys as well as the plains, except in Bosnia, where the climate is too cold. Wheat, rye, barley, oats, and buckwheat are also pretty generally cultivated; and millet is grown in the more sheltered places. Rice is grown only along the banks of the Maritza and other marshy tracts in the S. provs. The quantity of this grain produced in European Turkey being insufficient for the consumption, a portion of the required supply is imported from Egypt and Asia Minor. Great quantities of haricots, beans, cabbages, onions, melons, cucumbers, tomatas, and capsicums are raised as articles of food; but the potato is eaten only in Bosnia, Croatia, Herzegovina, Montenegro, and a few places in Servia and Albania; lentils, turnips, artichokes, asparagus, beet-root, and many other vegetables common amongst us, are almost unknown in Turkey. Though not usually drunk by the Mussulmans (except those of Lower Albania), wine is grown in most provs. of Turkey in Europe, but Wallachia and Moldavia (which see), Bulgaria and Servia, are the principal wine countries.

Turkish wines are mostly red; white wine is produced only in Wallachia, W. Bulgaria, and at Semendria, and a few other places. The best wines are very high coloured and somewhat similar to those of Cahors, and of Radicopani in Italy. These are grown chiefly in Macedonia, in the basins of Scutari and Prisren in Albania, Mostar in Herzegovina, on the hills along the Servian Morava in Thrace, and in the vicinities of Lovdscha in Bulgaria, and Meteora in Thessaly. Certain growths in the SW. of Macedonia deserve particular mention. The inhabs. of those places possess, in fact, a valuable source of wealth,

of proper cellars for storing the wines, and their rude preparation, detract greatly from their excellence. In Thessaly and Albania they are commonly spoiled, at least in the estimation of most foreigners, by the addition or absorption from the barrels and skins, of resin or turpentine. In certain cantons, however, the use of such substances is not supposed to be necessary, and the wines there are accordingly very palatable. In Bosnia the vine is replaced by the plum, and the favourite beverage there is a liqueur made from its juice, called *slivovitz*. Peaches, apples, cherries, almonds, and hazel nuts are grown, but grafting, and all other horticultural operations, are either unknown or much neglected. The olive flourishes in the S. provs. only, and most of the Turkish oil is grown in Asia. Flax, hemp, sesamum, saffron, cotton, tobacco, castor oil, and madder are among the principal remaining articles of culture. The care of the forests does not seem to occupy much attention, and in many districts, formerly well wooded, wood for fuel is becoming scarce. Live hedges are rare; where the fields are enclosed it is either with dry wood or stone walls, and where neither material is plentiful, as in E. Thrace, the fields are entirely open.

The vine and mulberry, tobacco, cotton, and oil share the chief attention of the agriculturists in Asiatic Turkey, after the production of the grains necessary for food. The culture of silk is extensively carried on in several districts, but especially round Brusa in Asia Minor, where the mulberry-tree is kept cut short, and receives a good deal of careful attention. In consequence, however, of the oppression practised on the cultivators, vast tracts of land in Asia Minor are wholly deserted, or occupied only by the scanty population of a few wandering tribes. No where, indeed, is the influence of misgovernment so apparent as in the present state of this celebrated country, favoured alike by situation and climate, and which, in antiquity, was the seat of many noble cities, and powerful and refined nations. Industry and civilisation have all but disappeared. 'No care whatever,' says Mr. Kinneir (Asia Minor, p. 51), 'is taken to improve the land; nor can this be a matter of surprise, when we reflect that the farmer is liable to be turned out at a moment's warning, and is certain of being taxed or plundered in exact proportion to the yearly produce of his farm. It is not, indeed, uncommon, should there be a prospect of a plentiful harvest, for the crops upon the ground to be seized by the pacha at a low valuation, and then put up to the highest bidder. This system, so destructive of industry, may be traced to the ill-judged but favourite policy of the Porte in continually changing the governors of their provinces, lest by being settled for a considerable period in their governments, they should shake off their allegiance, as many have already done. The pacha, therefore, who, during the short time he remains in favour, has not only to feed the avarice of the imperial ministers, but also to accumulate an independency for himself before his retirement from office, is heedless of the interests of the farmer, or of those who are to succeed him, and only anxious to collect wealth. We consequently observe that those provinces where the chiefs maintain their independence, are invariably the richest, best peopled, and in every respect the most flourishing; since they find it their interest to encourage the cultivators of the land, who are continually deserting those parts of the country immediately governed by the sultan's officers, to place themselves under their protection. The prosperity of the provinces of Asia Minor is in this manner always fluctuating,

according to the actions and dispositions of their respective rulers. Sometimes they are well peopled and cultivated (I speak comparatively), and at others waste and forsaken; whole villages emigrate from one district to another without much trouble or expense, since their houses are simple and of easy construction, and their articles of furniture so trifling as to be transported with facility on the backs of the cattle, which supply them with milk during the journey, and everywhere find abundance of pasture. The Greeks, called *Euroomi* by their Turkish lords, constitute a considerable portion of the peasantry in this part of the empire, and are not, in my opinion, the fallen and dastardly race usually represented. The political or religious institutions of a state affect, without doubt, the character of a people, and this is nowhere more conspicuous than throughout those quarters of the globe where the blighting doctrines of Mahomet have been diffused. The unjust and cruel persecutions carried on by the Turks have damped the fiery spirit of the Greeks, and rendered distrust and deception absolutely necessary to the safety of their persons and property; whereas, under a more enlightened and less despotic government, the national character of that people would probably rise to the standard of the inhabitants in most of the civilised countries of Europe. To me they have always appeared as dispirited and broken-hearted; but at the same time ready to rise, if supported, and crush their vindictive rulers to the earth.'

There are in Turkey great numbers of sheep and goats, the flesh of which constitutes the principal animal food of the inhabitants; but there are proportionally fewer cattle than in other countries of Europe, beef being seldom, and veal never, eaten by the Turks. The sheep are nearly all of a small, thick-bodied breed, with a white fleece; Merino, large-tailed, or other improved breeds, are met with only in Servia, into which they were introduced by Prince Milosch, or in Bosnia. In Wallachia the sheep have tall spiral horns, and their wool is a principal source of wealth. The pastures there are fine and extensive, and large flocks are brought thither from Transylvania, to be depastured during winter. At the same season the sheep from the table-land of Cappadocia are driven into the plains of N. Syria, and many of the migratory Koord and Turkman tribes of Asia seek the pasture lands about Angora, the traders of which town supply their various wants, receiving in return the wool, skins, and other produce of their flocks, in which articles Angora has a very considerable trade. The cattle along the banks of the Save and Danube appear to be a degenerate Hungarian breed. Those of the more S. provs. are different, being of medium size, and short-horned. Oxen are everywhere employed in field labour. Buffaloes are common, particularly in Bulgaria and Thrace. In Bosnia and other W. provs. some tolerably good cheeses, similar to Gruyère, are made; but the cheese of most parts of Turkey is in general too insipid to suit our taste. In making cheese, the milk of ewes and goats is partially employed, but in general only in the absence of that of the cow and buffalo. Turks abhor the hog so much, that they do not generally permit its sale in the towns, where they form the chief proportion of the pop. Nevertheless, they are reared in vast numbers in Servia, Bosnia, and other N. and W. provs., and, in fact, constitute the chief resource of the Servians. The Turks are good horsemen, and take pride in their horses. Little of that care is, however, bestowed on them that is common in W. Europe. They are fed only twice a day, sometimes they are not put into

stables, and are not groomed and trimmed as in Europe. The horse of European Turkey is generally of middle size, or rather below it, with a short neck, strong limbs, and a bay chestnut, reddish brown, or white, seldom a grey colour. They are usually fed on barley, oats being used for horses only in the NW. provs. The horses of Asiatic Turkey seem to be chiefly of Arabian descent. The Montefik are an excellent race of horses, bred by a great tribe of that name on the banks of the Euphrates. In Armenia and Koor-distan a prodigious number of fine animals might be procured at a cheap rate for the cavalry: the horses of Bagdad are large, and many of them show a great deal of blood; but those bred in the desert bordering on Damascus are, upon the whole, the finest. The ass is much used in Roumelia and S. Albania. Mules are scarce in those provs., but very numerous in Montenegro, and other mountainous parts of Turkey.

There are mines of copper, argentiferous lead, iron, and other minerals in various parts of both European and Asiatic Turkey; and it is generally believed that several of the mountain chains, which bound or intersect the Turkish provs., contain ores, not only of the useful, but of the precious metals. The Wallachian and Moldavian gipsies collect from the beds of the rivers pellets of gold mixed with a small quantity of silver, by means of which they are enabled to pay into the treasury the annual tribute of a drachm of gold imposed upon each man. But mining industry is not profitable in Turkey from various causes. 'The ignorance of the people,' (says Mr. Thornton, 'Present State of Turkey'), 'in the art of working the mines with economy, is perhaps one cause of the neglect with which the Ottomans appear to treat this source of wealth; but the chief obstacle to exploration is the rapacity of government, which would seize upon the advantages of any new discovery, and subject the provincialists to the unrecompensed labour of opening the mines and extracting the ore.' Asphaltum, nitre, salt in Wallachia, and coal in Bulgaria are among the mineral products of the empire, but are by no means raised to the extent that they would be under a liberal political system. Between Eski-shehr and Servi-Hissar, in Asia Minor, the substance called *meerschaut*, so much used for German pipes, is found in large quantities. It is a porous friable stone, almost entirely composed of small-grained vitreous or transparent felspar, decomposing and passing into a variety of porcelain earth. Great quantities of pipe-bowls are manufactured from this material, and sent to Constantinople for export into Germany.

The manufactures of Turkey are more numerous, and display greater excellence, than might have been expected in a country so backward in the arts. Indeed, her success in manufacturing industry is, upon the whole, greater than that of several countries ranking higher in civilisation. The satins and silks stuffs, the velvets of Brusa and Aleppo, the serges and camlets of Angora, the crapes and gauzes of Salonica, the printed muslins of Constantinople, the carpets of Smyrna, and the silk, linen, and cotton stuffs of Cairo, Scio, Magnesia, Tokat, and Costambol, establish a favourable, but not an unfair, criterion of their general skill and industry. The workmen of Constantinople, in the last century, excelled those of France in many of the inferior trades. They still practise all that they found practised; but, from an indolence with respect to innovation, they have not introduced or encouraged several useful or elegant arts of later invention. The Turks call in no foreign assistance to work their mines: from their own quarries their own labour extracts

the marble and more ordinary stone which is employed in their public buildings. Their marine architecture is by no means contemptible, and their barges and smaller boats are of the most graceful construction. Their foundry of brass cannon has been much admired, and their musket and pistol barrels, and particularly their sword blades (though the sword blades of Damascus are not so famous as formerly) are held in great estimation even by foreigners. Their manufactures of Morocco and other leather, and of gold and silver lace, &c. deserve also to be mentioned with praise.

But it appears that most branches of manufacture formerly carried on in Turkey have declined, and are now in a very depressed state. The domestic manufacture of cotton stuffs was formerly spread over almost all the European provinces; and in Ambelakia and some other places the spinning and dyeing of yarn and the fabric of stuffs was carried on upon a large scale. But the introduction of the cheaper yarn and stuffs of England has all but wholly destroyed the Turkish factories; and it has, also, greatly reduced the domestic manufacture. These results might, however, have been anticipated. Except in a few peculiar products, Turkey has no facilities for the prosecution of manufacturing industry. She is essentially an agricultural country; and such is the excellence and variety of her soil and raw products, that her exports might be increased in a degree not easy to be imagined.

The Turks have made no progress in the fine arts, and are but little acquainted with the higher sciences. 'Their buildings,' says a recent traveller, 'are rude incoherent copies, possessing neither the simplicity nor unity of original invention. Heavy in their proportions, they are imposing only from their bulk: the parts do not harmonise, nor are they subservient to one leading principle; the details are bad both in taste and execution; the decorations have no use, no meaning, no connection with the general design; there is nothing which indicates the conceptions of genius. The energies of the latter are chilled and repressed by the monotony of Turkish habits and the austerity of their customs. Their cities are not adorned with public monuments, whose object is to enliven or to embellish. The circus, the forum, the theatre, the pyramid, the obelisk, the column, the triumphal arch, are interdicted by their prejudices. The ceremonies of religion are their only public pleasures. Their temples, their baths, their fountains, and sepulchral monuments, are the only structures on which they bestow any ornament. Taste is rarely exerted in other edifices of public utility, *khans* and *bezestins*, bridges and aqueducts. Sculpture in wood or in stucco, and the engraving of inscriptions on monuments or seals, are performed with neatness and admirable precision; and the ceilings and wainscoting of rooms, and the carved ornaments in the interior of Turkish houses, show dexterity and even taste. But their paintings, limited to landscape or architecture, have little merit, either in design or execution; proportion is ill observed, and the rules of perspective are unknown. They reckon time by lunar revolutions, so that, in the space of 33 years, the Turkish months pass through every season. Their knowledge of geography does not extend beyond the frontiers of their empire. Their surgery is rude, from want of science, of skill, and of instruments.'

Trade.—The increase in the trade and commerce of Turkey within the last thirty years has been very great. In 1831 the trade with England amounted to 888 684*l.*; in 1839 to 1 450 224*l.*; in

1848 to 3,116,365*l.*; and in 1850 to 5,639,898*l.* In twenty-three years the trade had augmented by 635 per cent. The trade with France increased still more rapidly. In 1833 the imports amounted in value to 16,730,000 francs, or 669,200*l.*; and in 1856 to 91,860,000 francs, or 3,674,400*l.* The exports from Turkey to France amounted in 1833 to 874,000 francs, or 34,960*l.*; and in 1856 to 131,546,258 francs, or 5,261,850*l.*

The subjoined table gives the quantity and value of the exports, shipped in the year 1862, from Turkey to Great Britain:—

| Names of Articles | Quantities | Value in Pounds Sterling |
|---|-----------------|--------------------------|
| Berries, yellow | 2,844 cwts. | 5,262 |
| Boxwood | 4,133 tons | 45,647 |
| Corn—Wheat | 163,999 qrs. | 435,268 |
| Barley | 669,218 | 955,889 |
| Maize | 916,673 | 1,580,997 |
| other Kinds | 28,098 | 39,123 |
| Figs | 43,463 cwts. | 90,922 |
| Galls | 7,158 | 84,529 |
| Gum, Tragacanth | 767 | 7,406 |
| Iron, Chromate of | 135 tons | 2,160 |
| Madder Root | 170,947 cwts. | 433,856 |
| Nuts, small | 6,110 bushels | 4,530 |
| Oil, Olive | 439 tons | 24,021 |
| or Otto of Roses | 1,143 lbs. | 15,828 |
| Opium | 195,366 | 187,643 |
| Raisins | 76,896 cwts. | 126,513 |
| Scammony | 26,262 lbs. | 35,758 |
| Seed—Flax and Linseed | 266 qrs. | 674 |
| Millet | 53,425 | 11,519 |
| Rape | 15,976 | 47,444 |
| Silk, Raw | 164,194 lbs. | 119,961 |
| Cocoons, &c. | 1,623 cwts. | 28,550 |
| Skins, Lamb, undressed | 272,603 No. | 17,037 |
| Sponges | 369,358 lbs. | 236,883 |
| Stone, in lumps, not in any manner hewn | 2,093 tons | 23,937 |
| Tallow | 4,118 cwts. | 11,494 |
| Terra Umbra | 894 | 79 |
| Tobacco, unmanufactured | 1,197,834 lbs. | 26,569 |
| Valonea | 17,868 tons | 261,501 |
| Wool or Hair, Goats' | 2,512,447 lbs. | 378,071 |
| Sheep and Lambs' | 1,165,100 | 49,458 |
| Woollen Manufactures: Carpets and Rugs | 37,316 sq. yds. | 15,293 |
| Do. unenumerated | — | 574 |
| All other Articles | — | 244,576 |
| Total | | 5,505,492 |

The following table contains a statement of the value of the exports of the produce and manufacture of the United Kingdom from Great Britain to Turkey in the three years 1861 to 1863:—

| Exports to | 1861 | 1862 | 1863 |
|--|-----------|-----------|-----------|
| | £ | £ | £ |
| European Turkey | 2,520,436 | 2,862,380 | 4,410,251 |
| Natolia, or Asia Minor | 467,364 | 617,772 | 1,044,094 |
| Wallachia and Moldavia | 162,606 | 168,548 | 157,880 |
| Syria and Palestine | 876,035 | 588,556 | 1,026,612 |
| El Hedjaz and Ports on the Euphrates or the Persian Gulf | — | 7,609 | 243,608 |

More than two-thirds of the value of British exports to Turkey consist of manufactured cotton goods. The rest is made up of a vast number of miscellaneous articles, chiefly metal goods and machinery. In 1860, the total exports from Great Britain to Turkey amounted to 5,457,839*l.*, in which cotton goods entered to the value of 4,225,395*l.*, namely 22,024,904 lbs. of cotton twist, value 878,781*l.*; with 229,201,821,826 yards of

plain and printed calicoes, value 3,324,492*l.*; and muslins, lace, and similar articles, to the value of 22,122*l.*

The subjoined statement gives the value of the exports—the produce and manufacture of the United Kingdom—from Great Britain to Turkey, at three successive periods, in 1846, 1853, and 1860:—

| | 1846 | 1853 | 1860 |
|-------------------------------------|------------------|------------------|------------------|
| To Turkey Proper | 1,749,125 | 2,029,305 | 4,408,910 |
| To Wallachia and Moldavia | 195,154 | 179,510 | 172,872 |
| Syria and Palestine | 267,618 | 306,580 | 655,323 |
| Total | 2,211,897 | 2,515,395 | 5,237,105 |

The increase of the imports and exports between Turkey and Great Britain on the one hand, and Turkey and France on the other, from the years 1851 to 1860, may be seen in the following table:—

| Years | Imports and Exports between Turkey and Great Britain | Imports and Exports between Turkey and France | Total |
|-------|--|---|------------|
| | £ | £ | £ |
| 1851 | 7,000,398 | 2,890,254 | 9,890,652 |
| 1852 | 6,864,741 | 3,476,915 | 10,341,656 |
| 1853 | 6,251,131 | 4,031,939 | 10,283,070 |
| 1858 | 9,535,239 | 6,235,181 | 15,770,420 |
| 1859 | 9,029,586 | 6,800,531 | 16,530,067 |
| 1860 | 10,963,329 | 8,385,156 | 19,348,585 |

In European Turkey, after the capital, Adrianople and Salonica are the chief centres of trade, and the first being the great depôt for all the goods coming to Constantinople from England, France, and Austria, supplies all the fairs throughout Roumelia and Bulgaria. Next to Smyrna, Aleppo is the chief seat of commerce in Asia. Caravans bring hither pearls, shawls, Indian and Chinese goods, from Bussorah and Bagdad; camels from Arabia; cotton stuffs and thread, Morocco leather, goats' hair, and galls from the pachalics of Mosul, Diarbekir, Orfa, and Aintab; furs, goats' hair, wax, gum ammoniac from Van, Erzeroum, and Kars; silk, copper, furs, and linens from Asia Minor; silk, Mocha coffee, soap, scented woods, ambergris, drugs, and pearls from Syria and Arabia; rice, coffee, and Egyptian produce from Latakia; silk manufactures from Brusa and Damascus; European cotton and woollen stuffs, printed muslins, hardware, watches, wrought amber, and fur from Smyrna and Constantinople. The principal articles of export are sheep's wool, goats' hair, cattle, horses, hogs (from Servia), hides, hare skins, wheat, raw cotton and silk, tobacco, raisins, figs, almonds, mastic and other gums, gall-nuts, valonea, leeches, honey, wax, saffron, madder, anise and linseed, turpentine, safflower, meerscham pipes, whetstones, carpets, silk and cotton fabrics, leather, copper, and metallic wares, with Arabian, Persian, Indian, and Chinese goods. The British trade with Turkey in Manchester, Glasgow, Birmingham, and Sheffield manufactures, and other British produce, has been steadily increasing for some years past.

The wealthier class of Turks are generally too apathetic and indolent for commercial pursuits, which they leave to the Greeks, Armenians, Arnauts, and Jews.

The extreme simplicity of commerce, from the absence of all legislation on the subject, is visible in the establishment of a merchant; no books, save one of common entry are kept; no credit

given; no bills discounted; no bonds, nor even receipts; the transactions are all for ready money; no fictitious capital is created; no risk or loss from bankruptcy to incur. A merchant, whose capital may exceed 20,000*l.*, will, very possibly, be without a clerk; and a small box, which he places on his carpet, and leans his elbow upon, encloses, at once, his bank and counting house.

Accounts are kept in piastres of 40 paras of 3 aspers each; or in purses of 500 piastres. But the rate of exchange is very variable, on account of the continual deterioration of the coin. The most common measures and weights are the oke = about 2½ lbs., and the quintal of 44 okes. The arschine = 2 ft. Engl. Distance is commonly measured by the hour = about 3 m.

Government.—Châteaubriand said of the Turkish government that it was an absolute despotism, tempered by regicide. In truth and reality, however, the government of Turkey is a species of theocracy. The grand seignior is supposed to be the lieutenant and vicerent of the Prophet, and consequently, also, in some measure, of the Deity himself. But though, at first sight, this may appear to confer all but unlimited powers on the sovereign; and though, in some respects, it certainly gives very great latitude to his actions, it at the same time subjects him to various restraints and limitations, which he dares not contemn or break through. His authority, in fact, is principally based on the Koran; and were he to abandon its doctrines, or act in the teeth of its precepts, or those deduced from it by eminent commentators, and sanctioned by custom, the foundations of his authority would be loosened, he would cease to be the lawful sovereign, and would be regarded as a usurper whom it was meritorious to dethrone. Hence, though absolute in some respects, the power of the grand seignior is, in others, in the last degree limited. Down to a recent period he might put those engaged in his service to death at pleasure; but had he interfered in any way with property left in trust to a mosque, or outraged the law by drinking wine in public, he would have run a great risk of exciting discontent, and, if he persisted in such conduct, of being dethroned.

'The Turks,' says an accurate observer (Porter's *Observations on the Turks*, i. 109, 12mo. ed.), 'learn very early that, if the prince be of right divine, he founds it on the Koran; that he is constituted such by the sacred code of laws, which, as a true believer, he has studied, and knew, before his accession to the throne, it would ever be his duty to observe; and that, consequently, he is as much bound and tied by all those laws as they themselves are. This is so explicitly and fully laid down in the Koran, that Mohammed thought it necessary to throw in rules of exception expressly for himself. Hence, when the people are notoriously aggrieved; their property or that of the church repeatedly violated; when the prince will riot in blood, or carry on an unsuccessful war, they appeal to law, pronounce him an infidel, a tyrant, unjust, incapable to govern; and, in consequence, depose, imprison, and destroy him.'

This dependence of the sultan on the Koran, though it limits, in some degree, his power to tyrannise over his subjects, opposes, at the same time, the most formidable obstacles to his attempts to introduce any organic changes, how expedient or necessary soever. The rights and social condition of the people, living in the Turkish empire, who have not embraced the religion of the conquerors, is supposed to be determined by the

the monarchy rests—of effecting any material changes in the situation of the dependent population. The Turks cannot, unless they abandon their own religion, amalgamate with them, or raise them to the same level as themselves; so that the nation must always consist of two distinct parts—the Turkish, or ruling portion; and the rayahs, or subjugated infidels, who exist upon sufferance, and can never arrive at any situation of power or emolument. The character of the Mohammedan religion is, in truth, an all but insuperable obstacle to any thing like real reform. Though less intolerant than most others, it is more contemptuous. It gives itself no trouble about the conversion of those whom it despises. It inculcates on the minds of its votaries the most exalted ideas of their own importance, and the most profound contempt for 'Christian dogs' and other unbelievers. There may, no doubt, be an imitation of European tactics, and an attempt to introduce something like the practices and institutions that prevail in European states; but it is impossible, so long as the religion of the Prophet maintains its ascendancy, that they can have any considerable influence. Submission to their power has saved the unbelieving population of the country from death; but nothing short of their embracing the religion of the conquerors can effectually protect them from insult and contempt, and consequently, also, from extortion and tyranny.

The grand seignior is assisted in the government of the empire by a cabinet-council or *divan*, consisting of the principal ministers of the empire, and of the mufti or head of the law. Until very recently the sultans were in the habit of delegating the greater portion of their authority to the grand vizier (*vizier azem*), who became, as it were, regent of the empire, being at the head of the civil government, and generalissimo of the military and naval forces. But of late years the powers of this high functionary have been very much curtailed. The functions of the other ministers correspond with those of minister for foreign affairs (*reis effendi*), of the interior, commerce, and finance (*tefterdar*), and of a commander-in-chief (*seraskier*), and a grand admiral. The court of Constantinople is generally known in other European countries by the title of the *Sublime Porte*, a designation derived from the *Bab Humayon*, or principal outer gate of the seraglio, whence the hattîscheriffs, or imperial edicts, are usually issued.

The *sheik-ul-islam* (mufti), or head of the clergy and chief interpreter of the Koran and the canonical laws, is a very important functionary. He nominates to all the principal offices in church and law, and takes precedence of every other subject in the empire, even of the grand vizier. On most great occasions the sultan applies to the sheik-ul-islam for a *fetwa*, or legal opinion, to ascertain whether his intended course of action be in accordance with the Koran. But this is not indispensable, and has very rarely been refused. Latterly, too, the opinions of the mufti have become of less importance. The mufti is always chosen from the *ulema*, a body comprising the clergy, with the interpreters and administrators of the law. But, though they all study together, the lawyers and judges are quite distinct from the clergy, it being left to every young man brought up in one of the colleges of the order to determine for himself, when he has attained a proper age and acquired a sufficient stock of learning, whether he will become a priest, or a doctor of law, or a judge: but it is to the latter, or the lawyers, that the

are all subordinate to the civil authorities, who exercise over them the power of diocesans. Magistrates may supersede and remove clergymen who misconduct themselves, or who are unequal to the proper discharge of the duties of their office. The magistrates themselves may also, whenever they think proper, perform all the sacerdotal functions; and it is in virtue of this prerogative, joined to the influence which they derive from their judicial power and their riches, that they have so marked a pre-eminence, and so preponderant an authority, over the ministers of public worship.

The members of the ulema constitute a sort of aristocracy. They pay no taxes or public imposts, and, by a peculiar privilege, their property is hereditary in their families, and is not liable to arbitrary confiscations. Their persons are sacred; their blood can on no account be shed; nor can they be legally punished in any way but by imprisonment and exile. It is to be observed, however, that the power and dignity of the ulemas are not hereditary in individuals, but in the order. Formerly they held their offices for life; but, about the end of the 17th century, they were made removable at pleasure, like other public functionaries. They are now appointed only for a year. Each individual, however, enjoys all the privileges of the order, independently of his holding any office, or exercising any public employment. There have been instances of muftis declining to obey the commands of the grand seignior, and of their remonstrating with him on the impropriety or illegality of his conduct; though, as the sultan makes the mufti, and can depose and exile him at pleasure, such conduct must necessarily be very rare, except when some formidable conspiracy is on foot, and when the powers of the sultan are consequently circumscribed. In the reign of Mustapha, the people put to death the mufti for having, as they alleged, misled the sultan. A Turkish historian, Demetrius Cantemir, tells a curious story of Sultan Murad IV. having commanded a mufti to be pounded in a marble mortar, saying, that 'heads, whose dignity exempts them from the sword, ought to be struck with the pestle.' Speaking generally, the influence of the mufti and ulema is uniformly opposed to all measures of reform, at least to such as might be supposed to militate in any way against the peculiar doctrines and regulations enforced by the Koran.

Besides the ulema, there is a privileged order, limited to the descendants of Mohammed by his daughter Fatima. These are called *oomra*, or *ameers*, have *synd* prefixed to their names, and are authorised to wear green turbans. Inasmuch, however, as they are very numerous, *oomra*, like brahmans in India, are found in even the most abject ranks of life.

Distribution and Government of Provinces.—Formerly the governments (*pachaliks* or *beylerbeyliks*) were much larger than at present; and it not unfrequently happened that a pacha at the head of a large government, having filled up the subordinate situations with his creatures, was able to cast off his allegiance, and to defy the sultan. Hence it has been for a long time past the policy of the Porte to diminish the size of the pachaliks, and so to lessen the danger of insurrection on the part of the pachas. At present the territories of the Turkish empire in Europe are divided into 14 eyalets, or governments, and subdivided into 43 sandjaks, or provinces, and 376 kazas, or districts. In Turkey in Asia there are 18 eyalets, 78 sandjaks, and 858 kazas; and in Turkey in Africa, 3 eyalets, 17 sandjaks, and

TURKEY IN EUROPE.

| Eyalets | Chief Towns | Pop. of Chief Towns |
|-----------------------------|-------------|---------------------|
| 1. Edirné, or Thrace | Adrianople | 100,000 |
| 2. Silistria | Silistria | 20,000 |
| 3. Boghdan, or Moldavia | Jassy | 50,000 |
| 4. Eflak, or Wallachia | Bucharest | 80,000 |
| 5. Widdin | Widdin | 25,000 |
| 6. Nisch | Nissa | 10,000 |
| 7. Uskup, or Scopia | Uskup | 10,000 |
| 8. Syrp, or Servia | Belgrade | 50,000 |
| 9. Bosnia | Serajevo | 60,000 |
| 10. Roumelia | Monastir | 15,000 |
| 11. Yania | Janina | 30,000 |
| 12. Selanik or Salonica | Salonica | 80,000 |
| 13. Djizair, or The Islands | Rhodes | 30,000 |
| 14. Kyrt, or Crete | Candia | 20,000 |

The eyalets of Silistria, Widdin, and Nisch are formed out of the ancient kingdom of Bulgaria; and those of Yania and Selanik comprise the ancient Epirus and Macedonia. The eyalets of Uskup and Roumelia are formed from Albania. The eyalet of Bosnia is composed of Bosnia, a part of Croatia, and of the Herzegovina. The eyalet of Djizair, or The Islands, comprises all the isles of the Ottoman Archipelago, of which the principal are Rhodes, Cyprus, Cos, Tenedos, Lemnos, Mitylene, Scio, and Patmos.

TURKEY IN ASIA.

| Eyalets | Chief Towns | Pop. of Chief Towns |
|----------------------|-------------|---------------------|
| 1. Kastamuni | Kastamun | 12,000 |
| 2. Khowdavendgiar | Brussa | 100,000 |
| 3. Aidin | Smyrna | 180,000 |
| 4. Karaman | Koniyeh | 30,000 |
| 5. Adana | Adana | 8,000 |
| 6. Bozok | Angora | 60,000 |
| 7. Sivas | Sivas | 30,000 |
| 8. Trabezoun | Trebizond | 50,000 |
| 9. Erz-rum | Erz-rum | 100,000 |
| 10. Kurdistan | Diarbekir | 60,000 |
| 11. Khabrout | Kharput | 50,000 |
| 12. Mossul | Mossul | 65,000 |
| 13. Bagdad | Bagdad | 105,000 |
| 14. Haleb, or Aleppo | Aleppo | 100,000 |
| 15. Saïda | Beyrout | 50,000 |
| 16. Scham | Damascus | 180,000 |
| 17. Habesh | Djedda | 18,000 |
| 18. Haremi-Nahevi | Medina | 19,000 |

The eyalet of Kastamuni comprises the ancient Paphlagonia; that of Khowdavendgiar, part of the ancient Bithynia, Phrygia, and Mysia. The eyalet of Aidin is formed from part of Isauria, Lydia, Ionia, Caria, and Isidia; the eyalet of Karaman contains part of Isauria, Lydia, Pamphylia, Cilicia, Lycaonia, and Cappadocia. That of Adana comprises Cilicia Petrea; those of Bozok and Sivas, Cappadocia; while Trabezoun, or Trebizond, is formed from the ancient provinces of Pontus and Colchis.

TURKEY IN AFRICA.

| Eyalets | Chief Towns | Pop. of Chief Towns |
|--------------------------------|-------------|---------------------|
| 1. Misr, or Egypt | Cairo | 250,000 |
| 2. Thrablcusi Garb, or Tripoli | Tripoli | 20,000 |
| 3. Tunis | Tunis | 200,000 |

A general governor, or pacha, who is supposed to represent the sultan, and is assisted by a council, is placed at the head of each government. The provinces and districts are subjected to inferior authorities, under the superintendence of the principal governors.

important situations, if not bestowed by the sultan on some of his favourites, was regularly sold to the highest bidder, the lease being renewed annually, provided the pacha or other functionary remitted to Constantinople a sufficient *douceur*, or, if not, he was superseded by some less parsimonious competitor. And, when in office, the only criterion of an improved administrator was the magnitude of his *douceurs*, and the amount of tribute he remitted to the public treasury, no inquiry being ever made into the means by which this revenue was raised. *Quocumque modo rem* was the brief and comprehensive maxim by which their conduct was regulated. The legitimate revenues of the pachas arose from the rents or produce of lands assigned for their maintenance, and from certain fixed imposts on the cities, towns, and villages of their pachalik. These, however, were in most instances the smallest portion of the revenue of the pachas. The far greater portion consisted of illegal demands of all kinds, which the people had no means of resisting.

The flagrant abuses consequent on this system had been often noticed, and some ineffectual attempts had been made to abate the evil by the grand vizier, Kiuprili, and other statesmen. At length the necessity of making some radical changes in the mode of administration became too obvious to be longer resisted. This led to the publication of a sort of constitutional charter, famous in the annals of Turkish legislation, the *Hatti Scheriff*, or Imperial Decree, issued on the 3rd of November, 1839. 'Every one knows,' begins this decree, 'that in the beginning of the Ottoman empire, the glorious precepts of the Koran and the laws of the empire were held as rules always revered; in consequence of which the empire increased in strength and greatness, and all its subjects, without exception, attained the highest degree of welfare and prosperity. Within the last 150 years a series of events and variety of causes have, from not abiding by the holy code of laws, and the regulations that arose from it, changed the welfare and strength into weakness and poverty. Thus it is that a nation loses all its stability by ceasing to observe its laws. These considerations have constantly presented themselves to our notice, and since the day of our accession to the throne, the public weal, the amelioration of the state of the provinces, and the relief of the people, have never ceased to occupy our thoughts. Bearing in mind the geographical position of the Ottoman empire, the fertility of its soil, the aptitude and intelligence of its population, it is evident that by bringing into operation efficacious means, we may obtain, by the assistance of God, the object we hope to insure, perhaps in the space of a few years. Thus, full of confidence in the Almighty, and relying on the intercession of our Prophet, we deem it necessary to seek, by new institutions, to procure to the states which compose the Ottoman empire the happiness of a good administration. These institutions should have three objects in view,—first, to guarantee to our subjects perfect security of life, honour, and property; secondly, the regular levying and assessing of taxes; and, thirdly, a regular system for the raising of troops, and fixing the time of their service.'

This *hatti scheriff* was supplemented by another charter of liberties, known as the '*Hatti-Humáyoun*' of February 18, 1856. The principal provisions of this imperial order were as follows:—
'Full liberty of worship is guaranteed to every religious profession. No one can be forced to change his religion. No legal documents shall

ish subjects to another, in consequence of difference in religion, race, or language. All foreigners may possess landed property, while obeying the laws, and paying the taxes.'

In addition to the various sources of weakness and decay originating in vicious institutions and a bad system of government, may be added the imperfect subjugation of the countries comprised within the limits of the empire. The inhabs. of several districts, both of European and Asiatic Turkey, enjoy, some almost a total and others a sort of semi-independence; forming so many asylums to which discontented and rebellious subjects from the adjoining provs. may retreat and form new schemes, and holding out the seductive and dangerous example of successful resistance. Exclusive of Servia, which is now only nominally under the Porte, there are numerous districts in Albania and Thessaly that are all but independent. Of these the most important is the country called Myrdita, or the mountainous country occupied by the Myrdites on both sides the Drin. They can bring 10,000 men into the field, pay no taxes, and do not even allow a single Turk to remain within their boundaries. In many parts of Epirus there are similar independent communities. The district of Montenegro, under the government of a military bishop, is so far independent as to be little else than an outpost of Russia; as are several districts in other parts of the country. In Asiatic Turkey the Druses and Maronites in Syria have succeeded in maintaining their independence; and many of the Turkman and other tribes found in Asia Minor are only nominally dependent on the Porte. And, in addition to all this, it was for a lengthened period the practice of the Porte in its treaties, or capitulations, with foreign powers, to stipulate that the subjects of the latter, or those under their protection, resident in Turkey, should be amenable only to such consular or other authorities as they might appoint. It is almost needless to add that this practice has been productive of much abuse. Protections were often accorded to those who least deserved them. In Constantinople and other large towns crowds of people were emancipated from all control on the part of government. The greatest crimes often went unpunished, and a system grew up incompatible with anything like a fair or equal administration of law and justice.

But even if the circumstances now alluded to did not exist, and the Turkish rule were in force in every part of the empire, still it could have little or no solidity. The population of European Turkey is supposed to comprise about 4,500,000 Mohammedans and nearly 11,000,000 Christians, there being about five of the latter to two of the former. There exists, between the followers of the two religions, a deep-seated antipathy. The dominant and the subjugated populations have never amalgamated, but are quite as distinct in their language, their belief, and their feelings as when they first came into contact. It is but fair to the Turks to state, that they have rarely, except when provoked by some outbreak, evinced a persecuting spirit. But nevertheless their behaviour to the vanquished population has been uniformly insolent and contemptuous, which has proved quite as effectual to produce feelings of indignation and disgust as more active measures. It is, therefore, unreasonable to suppose that there can be any thing like a reconciliation between the races, or that the Christian population will ever make common cause with the Turks. They are, and must necessarily for a very long period continue to be implacable enemies. Nothing but the

other can ever secure the tranquillity of the country.

Justice.—The Ottoman empire is governed by a code of laws (*multeka*), founded on the precepts of the Koran, the oral laws of Mohammed, his traditions, usages, and opinions, together with the sentences and decisions of the early caliphs, and the doctors of the first ages of Islamism. This code comprises a collection of laws relating to religion, civil, criminal, political, and military affairs; all equally respected as being theocratical, canonical, and immutable, though obligatory in different degrees, according to the authority which accompanies each precept. In some instances it imposes a duty of eternal obligation, as being a transcript of the Divine will revealed to the Prophet; in others it invites to an imitation of the Prophet in his life and conduct. And though to slight the example be blameable, it does not entail upon the delinquent the imputation or penalty of guilt; while the decisions of doctors on questions that have arisen since the death of the Prophet are of still inferior authority. When a matter occurs that has not been foreseen or provided for by the early promulgators of the law, the sultan pronounces a decision; and his authority is absolute in all matters that do not interfere with the doctrines or practical duties of religion. The *multeka* is, however, alone considered as paramount law: the decisions or decrees of the sultan (*hatti scheriff*), of which a compilation was made by Solymán the Magnificent, under the name of *canon nameh*, are considered as emanations from human authority, and, as such, are susceptible of modification, or even abolition, remaining in force only during the pleasure of the sultan or his successors. The *adet*, or provincial customs, are allowed considerable influence.

In all the districts and towns of the empire, justice is administered by judges (*cadis*), who are of different ranks, according to the importance of the place in which they are established, each *cadi* being assisted by a deputy, or *naib*. Nothing can be more simple and expeditious than the forms of proceeding in Turkish courts. Each party represents his case, unassisted by counsellors, advocates, or pleaders of any kind, and supports his statement by the production of evidence. The deposition of two competent witnesses is admitted as complete legal proof, in all cases whatever.

The promptitude of Turkish justice has been often praised. In Turkey no ordinary legal authority can detain an untried man in prison more than three days, and in criminal cases the execution of sentences followed close upon the decision of the judge: but neither of these regulations appears to be advantageous; for, in the one case, sufficient time was not allowed to prepare either a defence or an accusation; and, in the other, the immediate execution of the sentence prevented the power of appeal to a superior tribunal, and consequently took away the only means of getting an unjust decision reversed, and, what is of more consequence, an unjust or ignorant judge exposed and degraded. But, in these respects, a great change for the better was effected by the new penal code, or rather by the new principles of penal law, issued in 1840. The sultan therein engages not to put to death any individual, whether publicly or privately, either by poison (such is the term used) or otherwise, unless he be convicted and condemned according to law. All capital cases are henceforth to be tried in public, and the sentence to be submitted to and

imprisonment, the galleys, and capital punishment, by hanging, drowning, beheading, or strangling, are the principal means of disposing of criminals. Death used sometimes to be awarded for what we should consider comparatively venial crimes, as, for instance, unfair dealing on the part of tradesmen; though a butcher or baker convicted of short weight was more frequently subjected to the not inappropriate penalty of being nailed by the ear to the door of his shop.

The grand vice of Turkish justice consists in the corruption of the judges and the toleration of perjury. A rich or powerful Turk has, in most instances, little or no difficulty in obtaining a decision in his favour, however unjust his cause; and as respects Christians and Jews, they have no chance in a litigation with a Turk, unless they succeed beforehand in securing the good offices of the judge. It is a principle of Turkish law, that written testimony is of no avail when opposed to living witnesses; and hence every precaution should be taken to render the latter trustworthy. But, instead of this, the most detestable perjurers enjoy an all but total impunity, and carry on a lucrative as well as an infamous profession. Magistrates are compelled to decide according to the evidence of notorious perjurers, unless they detect their falsehood at the moment. The flagitious venality of the judges, and the number of false witnesses connived at, and whose testimony is accepted, are the real opprobrium of Turkish justice. The evidence of Christians was formerly not admissible in courts of law, but this degrading disqualification was done away with in the year 1854.

There is a considerable discrepancy in the accounts of the state of the police in Turkey, but travellers say that it is extremely defective. No doubt, however, considering the abuses inherent in most departments of the administration, it is superior to what might have been expected. This is mainly ascribable to the regulation which makes every district of the country responsible for the murders, robberies, and other crimes of violence committed within its bounds, and which consequently makes their repression the business of all the more respectable inhabitants.

Owing to the jealousy of the Turks of the invasion of their privacy, no writ of search can at any time be executed in the interior of the house of a Turk but in the presence of the imam; nor in that of a Christian, except accompanied by a priest; nor of a Jew, unless a rabbi be present. The rooms occupied by the women, which are never entered, frequently shelter criminals.

Army.—Previously to 1826, the janizaries formed the nucleus and main strength of the Turkish armies; and, though now destroyed, a short notice of that once famous militia, long the terror of Christendom, may not be unacceptable.

The most probable opinion seems to be, that the janizaries were originally established by Amurath I., in 1362, and consisted at first of about 12,000 Christian captives, who were renewed by incorporating with them a fifth part of the prisoners of war. 'But when,' says Gibbon (chap. 65), 'the royal fifth of the captives was diminished by conquest, an inhuman tax of the fifth child, or of every fifth year, was rigorously levied on the Christian families. At the age of 12 or 14 years, the most robust youths were torn from their parents; their names were enrolled in a book; and from that moment they were clothed, taught, and maintained for the public service. According to

entrusted to the care of the pachas, or dispersed in the houses of the Anatolian peasantry. It was the first care of their masters to instruct them in the Turkish language; their bodies were exercised by every labour that could fortify their strength; they learned to wrestle, to leap, to run, to shoot with the bow, and afterwards with the musket; till they were drafted into the chambers and companies of the janizaries, and severely trained in the military or monastic discipline of that order. The youths most conspicuous for birth, talents, and beauty were admitted into the inferior class of the *agiamoglans*, or the more liberal rank of *ichoglans*, of whom the former were attached to the palace, and the latter to the person of the prince.

It is needless to add that the janizaries were taught to believe implicitly in the doctrines of Mohammedanism; and, having no relations or family ties to bind them to society, they regarded themselves not merely as the soldiers, but as the children of the sultan. They enjoyed, partly by the voluntary and partly by the enforced concessions of their sovereigns, several valuable privileges and immunities. They formed the body-guard of the sultan; they were stationed in the capital, and paid, not like the rest of the army, by assignments of land, but in money; and their captain was one of the most important officers in the public service.

But though formidable at first only to the enemies of the country, they gradually became hardly less formidable to their sovereigns. According as the severe discipline by which the Turkish armies had been originally distinguished was relaxed, and the sceptre fell into feebler hands, the janizaries became unruly, insolent, and overbearing. On various occasions they insulted the majesty of the throne, and, in 1623, they even proceeded to depose Osman II. Hence it had long been a favourite object with the sultans to endeavour to weaken the force and influence of the janizaries. But their efforts in this view had, until recently, but little success. Selim III. having endeavoured to countervail the influence of the janizaries, by creating a regular army (*nizam*), the former mutinied, and Selim lost his life in the commotions that ensued. But his successor, the late sultan, was more fortunate in his struggle with this unruly soldiery. In 1826 he issued a *hatti scheriff*, directing that the janizaries should be incorporated with the regular troops. The janizaries refused to obey this order; but the sultan having previously secured the co-operation of the mufti and of their *agha*, they were completely defeated, and such of them as escaped the conflict in which they were involved, were deprived of their former insignia, and distributed among the new regiments of the line, so that there is now hardly a trace to be found of this once powerful force. Previously to and since the destruction of the janizaries, it has been a favourite object with the sultans to organise and discipline their troops after the European fashion. It has been supposed by some that the troops, being conscious that they have become the pupils and copyists of the infidels they so long despised, will lose, in the decline of their enthusiasm and sense of nationality, more than they are likely to gain by the improvement of their discipline. But it is doubtful whether this notion will be realised. According to Marshal Marmont, 'the lot of the Turkish soldiers is a very happy one. They are better fed than any other troops in Europe, having an abundance of provisions of excellent quality, and partaking of meat once, and of soup twice, a day. Their magazines are filled with stores, and the regiments have

piastres per month; the whole of which he receives, as there is a prohibition against withholding from him any part of that sum. In short, every thing has been effected that could promote the welfare of the soldier.'

The military force is divided into, 1st, the regular active army, called *nizam*; 2nd, the reserve, or *redif*; 3rd, the contingents of auxiliaries; and, 4th, the irregular troops.

The regular active army consists of six corps or camps (*ordou*) under the command of a field-marshal (*mushir*), with their head-quarters at Scutari, Constantinople, Monastir, Karbrout, Damascus, and Bagdad. Each *ordou* consists of two divisions, commanded by a general of division (*ferik*). Each division is divided into three brigades, commanded by generals of brigade (*livas*). The *ordou* consists of 11 regiments, viz. six regiments of foot, four of horse, and one regiment of artillery. Besides the six *ordous*, there are three detached corps—one brigade on the island of Candia, numbering 4,000 regulars, 3,500 irregulars, and 600 native cannoniers—a total of about 8,000 men; a second brigade in Tripoli, consisting of one regiment of foot, and one of horse, to the strength of 4,000 men; and a third brigade, of 4,000 men, at Tunis. The three detached corps muster, therefore, to the strength of 16,000 foot and horse. The special corps, under the command of the grand master of the artillery, are likewise divided into *ordous*. They consist of, 1. The central corps of artillery (four regiments), one reserve regiment, and three regiments which are quartered in the various fortresses of the empire, in the forts of the Dardanelles and of the Danube, on the coasts of Asia Minor and the Black Sea; 2. The engineer brigade of two regiments of 800 men each.

The reserve, or *redif*, forms a second army, with the same organisation as that of the *nizam*, and consisting of the same number of regiments of the various arms. These regiments are divided into battalions, squadrons, or companies, and have their standing staffs of officers and corporals on active service, and receiving full pay. It is the duty of the latter to live in the towns and villages among the soldiers, who, though on leave, are nevertheless not discharged from the service, and these soldiers they must collect and drill once a week. The *redifs* gather every year for four weeks at the head-quarters of their respective *ordous*, and take part in the field manœuvres. While thus on service the *redifs* have the regular pay and the usual allowance of provisions.

The auxiliaries consist of the contingents of the tributary provinces. These provinces are—Wallachia and Moldavia, Servia, Bosnia and the Herzegovina, Upper Albania, and Egypt. It is difficult to give even an approximate idea of the numbers of the auxiliaries; much depends on the politics of the time, or the enemy against whom they are expected to take the field. In the late war with Russia the number of auxiliaries was stated to amount to 75,000 men, viz. 30,000 from Bosnia and the Herzegovina, 20,000 from Upper Albania, and 25,000 from Egypt. According to official returns, the irregular troops consist of—

| | |
|---|--------|
| 1. Kavas, or Gendarmes on foot, Seymens or Mounted Gendarmes, and County Militia or Soubechis | Men |
| 2. Tartars of Dobrodja and Asia Minor | 30,000 |
| 3. Hungarian and Polish Volunteers | 5,000 |
| 4. Moslem Volunteers | 2,000 |
| | 50,000 |
| Total of Irregulars | 87,000 |

The total of the military forces of Turkey may

| | Regiments | Registered | War Footing |
|-----------------------------------|-----------|------------|----------------|
| Infantry | 36 | 117,360 | 100,800 |
| Cavalry | 24 | 22,416 | 17,280 |
| Artillery | 6 | 7,800 | 7,800 |
| Artillery in Fortresses | 4 | 5,200 | 5,200 |
| Engineers | 2 | 1,600 | 1,600 |
| Detached { In Candia | 4 | 8,000 | 8,000 |
| Corps { Tripoli | 2 | 4,000 | 4,000 |
| { Tunis | 2 | 4,000 | 4,000 |
| | 80 | 170,376 | 148,680 |
| Reserve | | | 148,680 |
| Auxiliaries | | | 75,000 |
| Irregulars | | | 87,000 |
| Total of Forces | | | 459,360 |

These 459,000 troops would not, of course, be prepared to take the field in the first weeks of a campaign: first, because the distances are too great, and the various provinces so thinly populated, all of which interferes with the speedy concentration of the contingents; and, secondly, because the expense of arming and keeping all these troops would be too heavy for the imperial treasury. It ought also to be remembered, that the numbers and service of the auxiliary contingents are likely to be affected by a variety of circumstances and events, and that the number of 75,000 may, according to circumstances, be increased or lessened by a half.

Formerly a considerable portion of the troops were furnished by the spahis and other holders of estates on condition of military service. But that system is now wholly changed, and the army is recruited by a conscription among the Turkish part of the population. The minimum age of conscripts is 20 years; the period of service is limited to 6 years; and the annual contingent is usually about 25,000 men. Only one son in a family can be taken as a conscript, and when there is but one son in a family, he is exempted. The conscription is, however, extremely onerous and unpopular, and has given rise to some very serious insurrections. On critical occasions a levy en masse may be resorted to.

The rayas, or Christian population, have hitherto been excluded from the service. In 1850, however, it was proposed to exempt them from the *kharadj*, or peculiar capitation tax payable by them, and to subject them, along with the Turks, to the conscription. But this proposal, being equally disliked by Christians and Turks, has not been acted upon. The uniform of the regular troops is blue, faced with red. The household troops, or body-guard of the sultan, comprises the élite of the army: their pay and appointments are better than those of the other troops.

Navy.—The Turkish navy has been entirely reconstructed since the year 1858. Previous to the late war against Russia, the navy comprised 6 ships of the line, 10 frigates, 6 corvettes, 14 brigs, 16 cutters and schooners, 6 steam-frigates, and 12 other small vessels. Total 70 vessels, manned by 34,000 sailors and 4,000 marines. Most of these ships were destroyed at Sinope, Nov. 1853, and others foundered in storms in the Black Sea. Newly built in the years 1860-62 were 23 screw steamers, of various sizes, with 820 guns. To these were added, in the two years 1863 and 1864, the following vessels:—Five iron-clads built in England, the ‘Abdul-Aziz,’ the ‘Osman Ghazy,’ the ‘Sultan Mahmood,’ the ‘Ourkhan,’ and the ‘Feltah;’ and a steam-corvette for the transport service, the ‘Said Bahri.’ Three other iron-clads, called the ‘Izzedin,’ ‘Fuad,’ and ‘Lameilh,’ were commissioned in July, 1864.

besides a screw frigate named the 'Guéné-Bikhran.' At no time has Turkey been considerable as a naval power; and as the Turks have no taste for the sea, her best sailors have always been Greeks, Christian slaves, or renegades. In 1770, the Turkish fleet was destroyed by the Russians in the harbour of Tcheshmeh; and the defenceless state in which the coasts, and even the capital, were then found to be placed, awakened the attention of government to the subject. Since that period many fine line of battle ships have been built in the Turkish ports, principally under the direction of Europeans; but, owing to the unskillfulness of the crews, and the ignorance of the officers, most of whom have not been bred to the sea, the money laid out on the ships has been little better than thrown away. The battle of Navarino inflicted a severe blow on the Turkish navy, and the emancipation of Greece, which formerly furnished the best sailors, was a serious injury to the Turkish fleet.

Houses and Mode of Life.—The houses of the Turks are built in contempt of all architectural rules. They are mostly only of one story, and are very rarely more than two stories in height, constructed of wood and sundried bricks, those of the better class being plastered and painted over on the outside. The windows when they open on a street or other exposed situation, are uniformly covered with lattice-work, which prevents the most inquisitive eyes from obtaining even a glimpse of what is going on within. But though mean and shabby on the outside, the houses of the more opulent Turks are often very sumptuously fitted up in the interior. The most convenient and magnificent apartments belong to the harem, or to the portion of the house appropriated to the exclusive use of the women; and this very frequently opens on a court having a fountain in the middle, and sometimes on a garden. The houses of the poorer classes are most uncomfortable, their windows being generally without glass, and their rooms without fire-places. In winter they are usually heated by means of braziers, or pans of charcoal, which suffocate while they warm.

Lady Mary W. Montague has given a lively and accurate description of the houses of the higher class of Turks. 'Every house,' says her ladyship, 'great and small, is divided into two distinct parts, which only join together by a narrow passage. The first house has a large court before it, and open galleries all round it, which is to me very agreeable. This gallery leads to all the chambers, which are commonly large, and with two rows of windows, the first being of painted glass: they seldom build above two stories, each of which has galleries. The stairs are broad, and not often above thirty steps. This is the house belonging to the lord, and the adjoining one is called the harem, that is, the ladies' apartment (for the name of seraglio is peculiar to the grand seignior); it has also a gallery running round it towards the garden, to which all the windows are turned, and the same number of chambers as the other, but more gay and splendid, both in painting and furniture. The second row of windows is very low, with grates like those of convents; the rooms are all spread with Persian carpets, and raised at one end of them (my chambers are raised at both ends) about 2 ft. This is the sofa, which is laid with a richer sort of carpet, and all round it a sort of couch, raised half a foot, covered with rich silk, according to the fancy or magnificence of the owner; mine is of scarlet cloth, with a gold fringe; round about this are placed, standing against the wall, two

next little ones; and here the Turks display their greatest magnificence. They are generally brocade, or embroidery of gold wire upon white satin; nothing can look more gay and splendid. These seats are also so convenient and easy, that I believe I shall never endure chairs as long as I live. The rooms are low, which I think no fault; and the ceiling is always of wood, generally inlaid or painted with flowers. They open in many places with folding doors, and serve for cabinets, I think, more conveniently than ours. Between the windows are little arches to set pots of perfume, or baskets of flowers. But what pleases me best is the fashion of having marble fountains in the lower part of the room, which throw up several spouts of water, giving at the same time an agreeable coolness, and a pleasant dashing sound, falling from one basin to another. Some of these are very magnificent. Each house has a bagnio, which consists generally in two or three little rooms, leaded on the top, paved with marble, with basins, cocks of water, and all conveniences for either hot or cold baths. You will, perhaps, be surprised at an account so different from what you have been entertained with by the common voyage-writers, who are very fond of speaking of what they don't know. It must be under a very particular character, or on some extraordinary occasion, that a Christian is admitted into the house of a man of quality; and their harems are always forbidden ground. Thus they can only speak of the outside, which makes no great appearance; and the women's apartments are always built backward, removed from sight, and have no other prospect than the gardens, which are enclosed with very high walls. They have none of our parterres in them; but they are planted with high trees, which give an agreeable shade, and, to my fancy, a pleasing view. In the midst of the garden is the chiosk, that is, a large room, commonly beautified with a fine fountain in the midst of it. It is raised nine or ten steps, and enclosed with gilded lattices, round which vines, jessamines, and honeysuckles make a sort of green wall. Large trees are planted round this place, which is the scene of their greatest pleasures, and where the ladies spend most of their hours, employed by their music or embroidery. In the public gardens are public chiosks, where people go that are not so well accommodated at home, and drink their coffee and sherbet.

Owing to the houses being mostly built of wood, fires are very frequent at Constantinople, and have sometimes been so very extensive as to threaten destruction to the entire city. The sultan generally attends in person to superintend the efforts made to suppress the fury of the flames. When rebuilt, little or no alteration is ever made in the form of the streets. It should, however, be observed, as especially marking the character of the Turkish government, that these fires are not always accidental. Indeed, how singular soever the circumstance may appear, there can be no doubt that fires in Constantinople are made to perform the functions of petitions and public meetings in England. In fact, the city has been set on fire, over and over again, for a number of nights together, in order that the grand seignior may be made aware of the deep discontent of his subjects, and of their dissatisfaction with his measures or his favourites, or both. The frequency and continuance of the fires evince their origin; and they have seldom failed to produce a change in the measures of government, and the dismissal or execution of the unpopular favourites.

Public baths and khans are varieties of public buildings, that are found in most parts of Turkey.

The use of the warm bath is universal among persons of both sexes, and all classes. Many of the public baths are handsome, and a few are really magnificent structures. They are mostly built of hewn stone, and comprise several apartments. 'On entering one of these establishments,' says a traveller, 'the visitor is conducted into a spacious and lofty hall, lighted from above; round the sides are high and broad benches, on which mattresses and cushions are arranged: here the bather undresses, wraps a napkin about his waist, and puts on a pair of wooden sandals before going into the bathing-room. The first chamber is but moderately warm, and is preparatory to the heat of the inner room, which is vaulted, and receives light from the dome. In the middle of the room is a marble estrade, elevated a few inches: on this the bather stretches himself at full length, and an attendant moulds or kneads the body with his hand for a considerable length of time. After this operation, the bather is conducted into one of the alcoves, or recesses, where there is a basin supplied by pipes with streams of hot and cold water; the body and limbs are thoroughly cleaned by means of friction with a horse-hair bag, and washed and rubbed with a lather of perfumed soap. Here the operation ends: the bather stays a few minutes in the middle chamber, and covers himself with dry cotton napkins: thus prepared, he issues out into the hall, and lies down on his bed for about half an hour.' The baths for ladies are similar, in most respects, to those for the other sex; but are more handsomely fitted up.

Khans are a description of public inns, or caravanserais, sometimes built by sultans and magnificent individuals, for the public use and accommodation; and sometimes constructed, as in England, on speculation. They are of various kinds. Exclusive of apartments for the use of travellers, and stables for their horses and camels, the larger khans have rooms in which the goods of merchants may be stored up. These are generally quadrangular structures, consisting of a series of apartments that open upon a terrace, which surrounds an inner court, and having stables in the back part of the building. The merchants store their goods in separate apartments, or in the rooms which they occupy; the muleteers, with their horses, encamp in the open air in the court, or retire to the stables; and the gateway, by which alone the court and rooms can be entered, being shut up at night, all are as safe as if they were in a fortress. In many towns these are the only taverns. Each khan has its *khanjy* (landlord), a *kakhia* (major-domo), a *khawijy* (coffee-maker), and an *odabasher* (waiter), who attends to the commands of all the inmates. Sometimes the rooms are furnished, and sometimes not; and frequently, especially in Asiatic Turkey, the apartments are lighted by a window, having paper for glass, opening on the terrace, so that they are, for the most part, dark and gloomy. Food is sometimes, but not generally, furnished in these establishments, the usual method being to have it cooked abroad, and sent in. Coffee, however, is generally prepared in the establishment.

Rice is the principal food of the lower orders, but the wealthier classes have a great variety of dishes. The breakfasts of the latter consist of fried eggs, cheese, honey and liban or coagulated milk. The hour of dinner is very early. At entertainments the guests sit cross-legged on sofas or cushions round a low table. In the houses of persons of distinction, handsome ivory spoons, and small pointed sticks, are laid beside each plate. The dishes are served singly, and

in rapid succession, sometimes to the number of 20 or 30; the guests help themselves, sometimes with their spoons, and sometimes with their fingers. Hashed lamb, poached eggs and lemons, stewed fowls, pigeons, pillaws, roasted meats, a whole lamb stuffed with rice and almonds, are favourite dishes: they are all highly seasoned with salt and spices, and sometimes with onions and garlic. The dessert consists of sweetmeats, of which the Turks are exceedingly fond; with coffee, sherbet, fresh honey, grapes, and figs. During dinner, nothing is drunk but water or lemonade. The supper is very similar to the dinner.

The month of Ramadan is observed as a fast; and from dawn till sun-set, during this month, the Turks neither eat nor smoke. But the moment the sun goes down, they eat a hearty meal; and the practice is, for the richer classes to keep the fast by sleeping at this season during the day, and sitting up eating and drinking during the greater part of the night.

The national dress of the Turks is loose and flowing; that of the women, with the exception of the turban, differing but little from that of the men. The shape and colour of the turban serves to distinguish the different orders of the people, and the functions of public officers. Latterly, however, it has become fashionable to imitate the dress and manners of the other European nations; though the former is inconvenient in consequence of the numerous ablutions, the performance of which is enjoined by the Koran.

All women of the upper classes, when they appear in the streets, have their faces carefully veiled. And such is the privacy of the harem or women's apartments, that, unless on very rare occasions, all males are excluded from them except the master of the family. *'Les plus proches parens, tels que les frères, les oncles, les beaux-pères, n'y sont reçus qu'à certaines époques de l'année, c'est-à-dire, dans les deux fêtes de beyram, et à l'occasion des noces, des couches, et de la circoncision des enfans.'* (D'Osson, Tab. Générale, iv. 318.) Polygamy is authorised by the law of the Prophet, but is a privilege not often resorted to. If a man marry a woman of equal rank, the marriage of any other wife is frequently guarded against by the marriage contract. In cases of polygamy, the wives are usually either slaves or women of an inferior rank to the husband. The seclusion, or rather slavery of the women, powerfully contributes to the maintenance of the worst prejudices of the Ottomans. But the practice is deeply rooted in Oriental habits, and will not be easily changed. It is a curious fact that, so late as 1841, a hattı scheriff was issued forbidding women from frequenting shops, from being out after sunset, and from employing young or Christian coachmen.

There is a regular slave-market at Constantinople; but slaves in the East, and especially in Turkey, are far from being in the depressed condition we might suppose. The laws of Turkey protect the slave from ill-usage; and, in this respect, the customs of the country are in complete harmony with the laws. 'The most docile slave,' says Marshal Marmont, 'rejects with indignation any order that is not personally given him by his master; and he feels himself placed immeasurably above the level of a free or hired servant. He is as a child of the house; and it is not unusual to see a Turk entertain so strong a predilection for a slave he has purchased, as to prefer him to his own son. He often overloads him with favours, gives him his confidence, and raises his position; and, when the master is powerful, he opens to his slave the path of honour and of public employ-

ment. If we seek for any confirmation of the truth of this assertion, let us look around the sultan, and observe who are the most distinguished men within his empire. Khosrew Pacha, the old seraskier, the man who has governed and ruled all things in Constantinople, was a slave from the Caucasus, purchased by a capudan pacha, whose protection has raised him to the highest offices. Halil Pacha, the son-in-law and most distinguished servant of the sultan, and to whom the brightest prospects are open, was a slave to the seraskier.'

The Turks are excellent horsemen, and throw the *djerid* or lance with the greatest dexterity and force; but, excepting this exercise, and that of wrestling, they indulge in no active exertion. Their delight is to recline on soft verdure under the shade of trees, and to muse without fixing their attention, lulled by the trickling of a fountain or the murmuring of a rivulet, and inhaling through their pipe a gently inebriating vapour. Such pleasures, the highest which the rich can enjoy, are equally within the reach of the artisan or the peasant. They never dance themselves, but enjoy public dances, the performers in which however, are reckoned infamous.

Turkish usages are, in truth, in almost all respects, the opposite of those of the West European nations. The close and short dresses of the latter, calculated for promptitude of action, appear in their eyes to be wanting both in dignity and modesty. They reverence the beard as the symbol of manhood and the token of independence, but they practise the depilation of the body from motives of cleanliness. In performing their devotions, or on entering a dwelling, they take off their shoes. In inviting a person to approach them, they use what with us is considered a repulsive motion of the hand. In writing they trace the lines from right to left. The master of a house does the honours of the table by serving himself first from the dish, he drinks without noticing the company, and they wish him health when he has finished his draught. They lie down to sleep in their clothes. They affect a grave and sedate exterior: their amusements are all of the tranquil kind: they confound with folly the noisy expression of gaiety: their utterance is slow and deliberate; they even feel satisfaction in silence: they attach the idea of majesty to slowness of motion: they pass in repose all the moments of life which are not occupied with serious business: they retire early to rest, and they rise before the sun.

Language, Literature, and Education.—The principal languages spoken in European Turkey are, 2. The *Turkish* and *Tartaric* languages, spoken by the Osmanlis, Tartars, and Yaruks (descendants of the Turcoman settlers in Macedonia). The Turkish language is very much intermixed with Arabic and Persian. It is expressive, soft, and musical, and easy to speak, but not easily written. Its construction is artificial and laboured, and its transpositions are more remote from the natural order of ideas than the Latin or German. 2. The *Arabic*, the written language, used at court and in public worship. 3. The new *Greek* or *Romaic*, which consists of a great many dialects, and differs from the Hellenic, or ancient Greek, still in some measure preserved among the inhabs. of the Epirotic mountains, and in the valleys of the Cassiodorus (Suli), though greatly intermixed with foreign words and phrases. 4. The *Slavonic*, in several dialects, spoken by the Slavonians, Bosniacs, Croatians, and Bulgarians. 5. The *Armenian*. 6. *Wallachian*, derived mainly from the Latin, but much intermixed with other

languages. 7. The *Arnautic*, *Skipetarian*, or *Albanian*, is not, as was formerly supposed, a jargon formed of the admixture of a number of languages, but is a peculiar and distinct language, having regular grammatical forms, and an essential character of its own. 8. The *Jewish*, i. e. Hebrew, intermixed with Spanish and Italian words. 9. The *Lingua Franca*.

The Turkish characters are, with some slight difference, the same as the Arabic and Persian, but they have a variety of handwritings. The Arabic Kufi, in later times Meschi (literally the characters used in transcribing), is only used in copying the Koran, and other sacred works. The Diwani is the handwriting used in business, letters, public documents, judicial proceedings, diplomatic affairs, official orders, and passports. It is written from the right to the left in an oblique direction, especially at the conclusion; all the letters are joined to each other, and twisted together, and the more they are so the more elegant is the writing considered. The Dsheri is used in patents, diplomas, inscriptions on mosques, burial-places, and other public edifices; its beauty consists in its oblique direction, upward and downward, and in the words being placed alternately above and below each other. The Talic writing was originally borrowed from the Persians, and properly signifies a flying or running hand. It is more pleasing to the eye than the other hands, and is a fine specimen of Oriental calligraphy. The Kirma, consisting of disjointed letters, is used in ledgers and registers. The Sulus (i. e. trebly thick) serves for title-pages, devices, and inscriptions upon coins. There are many more varieties of handwriting, which it is needless to specify. Instead of pens the Turks write with a reed (*Culum*, *Culumus*), which is cut like a pen, but without a slit. The vowels, which, as in Arabic and Persian, are placed above and below the consonants, are generally omitted in writing (the Koran excepted), which renders the reading difficult to an unpractised eye. There are no marks of punctuation. As they are without tables, they usually write upon the left knee or hand, and instead of moving the hand, they move the paper in the process of writing.

The first printing press introduced into Turkey was established at Constantinople, in 1576, by Jews, who were, however, prohibited from publishing any Arabic and Turkish works. About 150 years afterwards, Ibrahim, a Hungarian renegade, succeeded in establishing a Turkish press; and it is worthy of remark, that in the hattı scheriff authorising its introduction, the sultan, Achmet III., felicitates himself that providence had reserved so great a blessing to illustrate his reign, and to draw down upon his august person the benedictions of his subjects, and of all Mussulmen, to the end of time. (Toderini, *Della Letteratura Turchesca*, 3 vols., Venezia, 1787.)

Down to 1742, 17 works in 23 volumes had issued from the press. From 1742 until 1755 it was not employed at all, and only at intervals until 1783, when it was attached to the newly established school of engineers. In the beginning of the present century it was transferred to Scutari, and attached to the military barracks in that place. Several of the sultans did much to advance its efficiency and extend its utility. The Turks, however, have a prejudice against printing, originating partly in an apprehension lest the Koran should be printed, which they would regard as the highest profanation, and partly in the opposition of the vast numbers of scribes and copyists, which the general use of the press would throw out of employment, and who, in consequence, take every

fellow-subjects against it. But, despite these difficulties, the art has made, and is continuing to make, progress.

No sooner were the Turks converted to Islamism, than they began not only to study the Koran, but also the works of the Arabians, their superiors in civilisation. It is an error to suppose that the Koran discourages learning. On the contrary, the Mussulman doctors reckon among their authentic traditions that 'the ink of the learned and the blood of martyrs are of equal value in the sight of heaven;' and that the world subsists by four principles, viz. 'the science of the learned, the justice of princes, the prayers of the faithful, and the valour of the brave.' (See the curious article on *Elm* (Science), in D'Herbelot, *Bibliothèque Orientale*, i. 629.) But unluckily they give the name of science to a spurious sort of metaphysics, to grammar, and mere verbal inquiries. Though their religion does not interdict, it is really incompatible with anything like philosophical discussion, or free investigation.

Law and theology are favourite studies. In the interpretation of the Koran and of the traditions, they follow the Arabian authorities, and most Turkish divines occupy their time with biographies of the Prophet, and evidences and reasonings in favour of the Mohammedan religion; these, with the innumerable commentaries on the Koran, form a mass of works which fill the greater part of their libraries. History, poetry, and metaphysics are not, however, neglected. Hammer, in his elaborate and valuable *History of the Empire*, has referred to an immense number of Turkish historians; and in his *History of Ottoman Poetry* (the first volume of which was published at Pesth in 1836) he gives short sketches of the lives of 212 Turkish poets, with specimens of their works. But he acknowledges at the same time that the Turks have no genius for original poetry, and that the whole of their poetry consists of translations from, and imitations of, the Arabic and Persian poets, to whom they stand in nearly the same relation that the Roman poets did to the Greek.

Jurisprudence, a favourite pursuit of the Turks, is studied in the works and laws of the learned imams, sheiks, and sultans, and in the traditional law of the Prophet (Sunna). The most remarkable printed collections of fetwas (decisions) are by Mufti Dshemali, Abdubrahman, and Mustapha Kodosi; the work of the latter, published at Constantinople in 1822, contains several thousand fetwas of 30 muftis in the 18th century. In 1827, there issued from the press 10,000 fetwas, by Abdubrahman, from 1645 to 1676, in 2 vols. folio; and, in 1830, 5,400 by Ali Effendi, which, with the collection of Abdulkерim Effendi, forms a work of high authority. Turkish literature is particularly rich in collections of bon-mots, puns, proverbs, tales, anecdotes, and even novels; and they possess several encyclopædias, and works upon the history of literature. The first volume of a bibliographical dictionary, in which are enumerated the titles of more than 30,000 different works in the Arabic, Persian, and Turkish languages, has been translated by Flügel, and published by the 'Oriental Translation Fund.' The reign of Solyman the Magnificent may be considered as the Augustan age of Ottoman literature. That great prince was a liberal patron of the arts and sciences, and of literature and learned men.

Public schools have been long established in most considerable Turkish towns, and *medresses*, or colleges, with public libraries, are attached to the greater number of the principal mosques. But, owing to the want of efficient masters, and of

by these establishments has been of comparatively little value. In schools the pupils have been taught to read and write the first elements of the Turkish language; the class-books being the Koran, and some commentaries upon it. In the medresses, which are the colleges or schools of the ulemas, the pupils are instructed in Arabic and Persian, and learn to decypher and write the different sorts of Turkish characters; instruction in a species of philosophy, logic, rhetoric, and morals founded on the Koran; and these, with theology, Turkish law, and a few notions on history and geography, complete the course of study.

The ignorance of the higher classes of Turks in regard to matters which are elsewhere known to everybody, is such as almost to stagger belief. But the evidence of the fact is unquestionable. Hammer states that when it was reported at Constantinople, in 1769, that a Russian fleet was about to sail from the Baltic for the Mediterranean, the divan treated the statement with contempt, being satisfied that there was no communication between them. And he farther states that, when he was interpreter at Constantinople in 1800, and it was proposed to bring to the assistance of the Porte an Anglo-Indian force from India by way of the Red Sea, the grand vizier denied the possibility of its being done; and that Sir Sidney Smith with great difficulty convinced him, by the exhibition of charts and otherwise, that the Red Sea was really connected with the Indian Ocean. (*Histoire Ottoman*, xvi. 248.) It is possible there may have been a change for the better since the time of Sir Sidney Smith. Among late improvements may be noticed the foundation of a new university in 1845; and the subsequent organisation of a plan of primary and secondary instruction. Special schools have also been provided, where instruction is afforded in the sciences necessary to the prosecution of the various military and civil employments. It must, however, be borne in mind, that Turkish schools are attended by boys only. In Turkey education is not considered necessary to a girl; so that by far the greater number of women, knowing little or nothing themselves, can communicate nothing to their children. 'Les femmes,' says M. Blanqui (*Voyage en Bulgarie*, p. 268), 'demeurent chargées de la première éducation des enfants; et, n'ayant à leur apprendre, car elles ne savent rien, elles opposent, sans le vouloir, une barrière infranchissable aux progrès de la civilisation. Telle est la plaie la plus essentielle de l'Islamisme. Tant que les femmes seront maintenues dans l'état de séquestration presque absolu où elles vivent, il sera impossible de faire pénétrer un rayon de lumière dans la nuit profonde qui couvre l'empire Ottoman.'

Revenue and Expenditure.—The revenue of Turkey was formerly divided into two portions, the *miri* or public revenue, and the *hazni* or private revenue of the sultan. But of late years this distinction has been abolished; some vexatious petty imposts have, also, been suppressed; and the collection of the others a good deal simplified. The actual revenue of Turkey is chiefly derived from taxes of three denominations—the *Verghi*, the *Aashr*, and the *Roussoumiat*. The *verghi*, or poll-tax, is a tax on the whole population, paid at a fixed rate for each house or family. The collection is left to the heads of the different communities, whose duty it is to distribute the tax between the rich and the poor according to their means. The second tax, the *aashr*, or tithe, is a tax of ten per cent. upon the produce of culti-

stamps, the sale of animals, taxes on shops, bakeries, butcheries, and mills, and from the rent of lands belonging to the crown.

According to a report of the grand vizier, the revenue and expenditure for the financial year 1861-62, amounted to—

| | |
|-------------------------------|-------------|
| Total Revenue for 1861-62 | £11,164,552 |
| Total Expenditure for 1861-62 | 12,739,088 |

Leaving a Deficit of £1,574,536

The excess of expenditure over income, dating from the year 1850, has given rise to a rather large public debt. The liabilities of the Ottoman empire are divided into two categories—the external or hypothecated debts, contracted, as their designation implies, abroad, and secured on special sources of revenue; and the internal debts, known principally under the generic term of *consolidés*, issued at Constantinople alone, and therefore dependent only on a compact between the Porte and its subjects, and secured on the general credit and resources of the empire. The external debts, with the exception of one loan, which was contracted in 1855, and guaranteed by England and France, bear an interest of 6 per cent., with a sinking fund of 1 and 2 per cent. The internal debts, for the most part, bear an interest of 6 per cent., with a sinking fund of 2 per cent. In both cases the sinking fund is applied to the payment of obligations at par by annual drawings.

The foreign debts of Turkey were as follows, at the end of 1864:—

| Years | Original Amount | Interest | Sinking Fund | Annual Charge |
|--------|-----------------|-------------|--------------|---------------|
| | £ | | | £ |
| 1854 | 3,000,000 | 6 per cent. | 1 per cent. | 210,000 |
| 1855 | 5,000,000 | 4 per cent. | 1 per cent. | 250,000 |
| 1858 | 5,000,000 | 6 per cent. | 2 per cent. | 400,000 |
| 1860 | 2,070,000 | 6 per cent. | 1 per cent. | 144,900 |
| 1862 | 8,000,000 | 6 per cent. | 2 per cent. | 640,000 |
| 1863-4 | 8,000,000 | 6 per cent. | 2 per cent. | 640,000 |
| Total | 31,070,000 | | | 2,284,900 |

The internal debt consists principally in treasury obligations, called '*Ischamis*' and '*Serghis*,' repayable, according to promise, at the end of 14 and of 10 years.

Historical Notice.—Othman, chief of the Oghuzian Tartars, is generally accounted the founder of the Turkish empire. On his succeeding his father in 1289, his dominions were comparatively inconsiderable, being confined to the lordship of Siguta, in Bithynia, and a small tract of adjoining territory. But the talent of Othman, and the bravery and zeal of his followers, enabled him to add greatly to his paternal inheritance, and to bequeath the whole of Bithynia and Cappadocia to his son and successor. From this period the tide of Turkish conquest began to roll forward with a force that could not be checked by the feeble resistance of the Greeks. In 1338, the Ottomans first obtained a footing in Europe. In 1362, Amurath, the grandson of Othman, instituted the *janigaries*—the first, and for a lengthened period the most powerful, numerous, and best-disciplined standing army established in modern times. The conquests of Timour threatened to subvert the Turkish power; but it soon recovered from the rude shocks it had sustained, and, in 1453, Mahomet II. entered Constantinople sword in hand, and established himself on the throne of Constantine and Justinian. But the undisturbed possession of all the countries from Mount Amanus to

son of Mahomet II., added Syria and Egypt to the dominions of his ancestors; and Solyman the Magnificent, the contemporary of the emperor Charles V., and the most accomplished of all the Ottoman princes, conquered the greater part of Hungary, and in the East extended his sway to the Euphrates. At this period, the Turkish empire was, unquestionably, the most powerful in the world. 'If you consider,' says the historian Knolles, who wrote above two centuries since, 'its beginning, its progress, and uninterrupted success, there is nothing in the world more admirable and strange; if the greatness and lustre thereof, nothing more magnificent and glorious; if the power and strength thereof, nothing more dreadful and dangerous; which, wondering at nothing but the beauty of itself, and drunk with the pleasant wine of perpetual felicity, holdeth all the rest of the world in scorn.' Nor had this mighty power even then reached its greatest height. Solyman was succeeded by other able princes: and the Ottoman arms continued to maintain their ascendancy over those of Christendom until, in 1683, the famous John Sobieski, king of Poland, totally defeated the Turkish army employed in the siege of Vienna. This event marked the era of their decline. For a while they continued to oppose the Austrians and Hungarians with doubtful fortune and various success, but the victories of Prince Eugene gave a decisive superiority to the Christians.

The despotism of the sultans, and the vast extent of their power, contributed for a lengthened period to accelerate the progress of decline. For a while, however, it was otherwise. The perilous circumstances under which the Turks were originally placed, and the difficulties and dangers with which they had to struggle, obliged their chiefs to exert all their faculties. Having to rule over bold and fanatical subjects, to act as their generals in war and their legislators in peace, they were compelled to practise the military and civil virtues. Considering that, except in a single instance, a period of nine reigns, and of 264 years, is occupied from the elevation of Othman to that of Solyman, by a series of warlike and able princes (Gibbon, xii. 57), it must be allowed that something more than chance, that the necessities of the times had produced this long line of able monarchs. No sooner, however, had the tide of Turkish conquest been stopped by the firm resistance of the Hungarians and Germans on the one side, and of the Persians on the other, than the Ottoman monarchs began rapidly to degenerate. The evil was aggravated by the regulation of Solyman the Magnificent, who, in order to hinder the rebellions and internal divisions that had sometimes occurred, established it as a principle, which has since been strictly adhered to, that none of the sultan's sons should be appointed to the command of armies or the government of provinces. This regulation had a fatal effect: instead of being educated, as formerly, in the council or the field, the heirs of royalty and of almost omnipotent power have since been brought up in the slothful luxury of the palace. Shut up in seraglios, without experience of public affairs, depraved by the flattery of women and of slaves, their intellects and their habits were enfeebled and debased; and their government, when they succeeded to the throne, naturally became corrupt and worthless.

The vast extension of the Turkish empire was another cause of its decline. It multiplied the enemies, not the subjects, of the state. To animate the various and discordant classes of people comprised within its widely-extended limits with the same spirit, and give them one common interest,

would have required the adoption of a liberal and enlarged system of policy; and to act in this manner was utterly repugnant to the maxims of Ottoman legislators. The inhabs. of the conquered provinces who refused to embrace the religion of the Prophet were branded with the title of Infidels. They existed only on sufferance; and though their rights were legally defined, their proud and fanatical masters seldom hesitated about trampling them under foot, and subjecting them to every species of insult and ill-treatment. It has been contended, indeed, and it may, perhaps, be true, that the tyranny to which the non-Mohammedan portion of the pop. has been subject has, by subduing their energies and debilitating their minds to the level of slavery, tended to secure the tranquillity of the empire. But whether this be so or not, it, at all events, ensured its depopulation, impoverishment, and degradation. Under this miserable government, palaces were changed into cottages, cities into villages, and freemen into slaves. It must not be supposed that the abuses of which this wretched state of things was the result, were not perceived by the more intelligent Turks. So early as 1690 it was proposed to reform the fiscal policy of the empire, and to interest the rayahs in the public prosperity, by commuting the various taxes laid upon them, and their contributions of compulsory labour and horses, for a single tax which should be perpetual and invariable. But the opposition to reform was then too powerful to be overcome; and abuses of all sorts continued to gain ground down to the accession of sultan Mahmoud II., in 1808. It then became evident to every one that, without some radical changes, the downfall of the empire could not be long averted. The sultan had sagacity to plan and vigour to carry them into effect. It would be too much to say that the policy which he and his successors to the present day, who all, more or less, followed in his footsteps, carried out, was in all cases the wisest or best that might have been adopted. But considering the difficulties with which the latter rulers of the empire have had to contend, they are entitled to the highest praise. And yet it is very doubtful whether the dissolution of the empire can be prevented. With the assistance of her allies, the late contest with Russia was brought to a successful termination. Most likely, however, this has been but a short respite. The implacable animosities of the races by which the country is occupied, and the numerical inferiority of the Turks, are circumstances that can hardly fail, sooner or later, to terminate their dominion.

TURNHOUT, a town of Belgium, prov. Antwerp, cap. arrond., in a wide healthy distr., 25 m. ENE. Antwerp. Pop. 14,979 in 1860. The town is well built, and has manufactures of cutlery, linen cloths, lace, carpets, and oil, with bleaching and dyeing establishments, tanneries, brick and tile factories.

TUY (an. *Tudæ ad Fines*), a fortified town of Spain, in Galicia, prov. Pontevedra, on the Minho, which separates it from the Portuguese territory, 57 m. S. by W. Saint Jago. Pop. 11,760 in 1857. The town stands on a height surrounded by several small rivulets, and has always been a fortress of some strength, and a key of Spain on this side. It is regularly laid out, and has well paved and clean streets, several squares and bridges, a cathedral, several hospitals and convents, a seminary, college, and 2 barracks. Its principal manufacture is of table linen, in which its inhabitants trade with Portugal; but it also produces hats, leather, and liqueurs. Its climate is rendered unhealthy by adjacent marshes.

TVER, a gov. of European Russia, between the 56th and 59th degs. of N. lat., and the 32d and 38th of E. long.; having N. Novgorod, E. Jaroslavl and Vladimir, S. Moscow and Smolensko, and W. Pskof. Area estimated at 26,000 sq. m. Pop. 1,491,427 in 1858. The surface of this government is generally more elevated than that of other parts of European Russia; and several large rivers, as the Wolga, Tvertza, Mologa, and Mednevitza, rise within its limits. In its W. part are several lakes. The Wolga has its source in the Lake of Selighur, and afterwards traverses the government in nearly its whole length from W. to E. The climate is severe, and the soil is but indifferently fertile. The harvests are precarious, and scarcely ever produce more than sufficient for home consumption. A good deal of hemp and flax, with beans, are grown, but few kinds of fruit succeed. The forests are extensive, particularly in the N., and about 319,000 deciatines of forest-land belong to the crown. Manufactures of little consequence, but increasing: those of dyeing materials and spirituous liquors are the principal; and there are others of bricks, glass ware, ropes, leather, and woollen cloths. This government is, however, distinguished for its commercial activity, and the capital of its merchants has been estimated at 17 million roubles. The trade centres mostly in Tver, the cap., and is facilitated by the Vischnij-Volotschok canal, which establishes a water communication between the Baltic and Caspian Seas. The district of the government traversed by this canal is inhabited by a tribe of Carelians, and in the cap. is a German colony; but the pop. is mostly Russian, of the Greek church. The government is divided into twelve districts; chief towns, Tver, the cap., Torshok, Rjef, and Bejetsk.

TVER, a town of European Russia, cap. of the above gov., on the Wolga, where it is joined by the Tvertza and Tmaka, and on the railway between Moscow and Petersburg; 90 m. NW. the former. Pop. 25,260 in 1857. In respect of the regularity of its streets and buildings, Tver ranks next to the two Russian capitals, but wants their bustle and animation. It is divided by the several rivers into the town proper, suburbs, and citadel. The last, surrounded by a rampart of earth, comprises the governor's residence, an imperial palace, the cathedral, and seminary; and its numerous towers and cupolas give it, at a distance, an imposing appearance. The cathedral is a square edifice, with a lofty spire, surmounted by a gilt copper dome, and surrounded, lower down, by four similar domes. The seminary, founded in 1727, for the instruction of 700 pupils in the sciences and ancient languages, is established in a convent built in the 13th century. There are numerous churches, government buildings, barracks, a theatre, and several public promenades, planted with trees. Tver owes its present regularity and beauty to a fire which almost totally destroyed it in 1763; after which the Empress Catherine ordered it to be rebuilt on a uniform plan. Some houses are of stone, but the greater part are of wood, and the paving is mostly of the same material.

Tver is a place of considerable trade, a large part of its pop. being merchants, or engaged in the navigation of the Wolga. It is an entrepôt for corn from the S. destined for Petersburg, and for goods conveyed overland to and from Riga. It is of considerable antiquity, having been the cap. of a principality as early as the middle of the 13th century. It has frequently suffered from the plague, and been taken by both the Tartars and Poles, but it has remained, with little inter-

ruption, attached to the dominions of Russia since 1490.

TWEED, one of the principal rivers of Scotland, forming, in the lower part of its course, the boundary between Scotland and England, has its sources on the E. side of Errickstane Hill, about 6 m. from Moffat. Its course is first NE. to Peebles; then E. with a little inclination to the S. to Melrose; it next passes Coldstream and Kelso; and, pursuing a north-easterly direction, falls into the sea at Berwick. The descent from the source of the Tweed to Peebles is 1,000 ft., and thence to Berwick about 500 ft. more. The waters of the Tweed are particularly pure and limpid. The first part of its course is through a fine pastoral country, especially celebrated in Scottish song, and the latter through one that is rich and well cultivated. Including windings, its length is reckoned at rather more than 100 m. Notwithstanding it conveys a large body of water to the sea, it is not navigable for any considerable distance. The salmon fisheries on the Tweed are of very considerable value and importance, being, in this respect, second only to those of the Tay. The fish is almost all conveyed, packed in ice, to London.

Among its principal tributaries is the Etterick, which, flowing from the S. parts of Selkirkshire, joins it at the Eildon Hills. A little lower down it receives the Gala, from Mid Lothian, and the Leader from the borders of East Lothian. The Teviot rises in Roxburghshire, on the confines of Dumfriesshire, and flowing NE., and receiving several tributaries, it falls into the Tweed at Kelso. The Till rises in Northumberland, near Ingram, and, pursuing a north-westerly course, falls into the Tweed at Tilmouth. Near Berwick the Tweed receives the Adder, a considerable river, formed by the junction of the Blackadder and Whiteadder, having their sources in the Lammermoor Hills. The basin of the Tweed is estimated at about 1,870 sq. m.

TWENTY-FOUR PERGUNNAHS, a district of British India, presid. and prov. Bengal, between lat. 21° 30' and 23° N., and long. 88° and 90° E., having N. Nuddea, E. Jessore, W. the districts of Calcutta, Hooghly, and Midnapore, from which it is divided by the Hooghly river, and S. the Bay of Bengal. Area, 3,690 sq. m. Pop. estim. at 600,000. Its surface is a dead flat, intersected by arms of the Ganges, and comprising many extensive jeels or marshes, with a considerable portion of the jungly tract known as the Sunderbunds. It has long been progressively increasing in productiveness and importance; but, like the adjacent district of Backergunge, has been notorious for the prevalence of dacoity or gang-robbery. The Hindoos are reckoned in proportion to the Moham-medans as 3 to 1.

TWICKENHAM, a village and par. of England, co. Middlesex, hund. Isleworth, on the Thames, 10 m. W. by S. London, and 2 m. SW. Richmond, on the London and South Western railway. Pop. of par. 8,077 in 1861. Area of par. 2,440 acres. The village consists of a street nearly parallel to the river, and of a number of detached villas. It is famous for having been the favourite residence of the most harmonious and correct of English poets, where he composed many of his noblest works, and where he expired on the 30th of May, 1744. But 'Pope's Villa' has been levelled with the ground, and the structure now lives only in his verses: even his grotto,

'Where, nobly-pensive, St. John sate and thought:
Where British sighs from dying Wyndham stole,
And the bright flame was shot through Marchmont's soul,'

has been suffered to go to ruin.

The church, ■ brick building, erected in 1714, contains the remains of the poet and of his parents. Pope himself raised a monument to the memory of the latter; and a monument to himself was raised, some years after his death, by his friend and literary legatee, Bishop Warburton. It is of grey marble, in the pyramidal form, and has a bust or medallion of the poet.

Among the existing villas in the vicinity of Twickenham, the most celebrated is that of Strawberry Hill, long the residence of Horace Walpole, by whom it was built, in a sort of trumpery Gothic style, and filled with a singular collection of rare, though mostly trifling, articles. A national school, for the education of children of both sexes, was established in the village in 1809.

TYNE, an important river in the N. of England, is formed by the junction of two very considerable streams, the N. and S. Tyne. The latter rises on the borders of Durham and Cumberland, near Cross Fell, one of the highest mountains in the great central range; and the former in the moorlands of Northumberland, close to the Scottish border. They unite a short way from Hexham. After their junction, the river takes an easterly direction; and dividing Northumberland from Durham, and passing Newcastle, falls into the sea at Tynemouth, having the towns of N. and S. Shields close to its embouchure.

The Tyne is navigable for ships of from 300 to 400 tons burden, as far as Newcastle, and is navigated a few miles farther by keels, a peculiar description of craft employed to carry coal to the coal ships. The banks of the Tyne at Newcastle are steep, and the ground rises on each side to a considerable height. Down to a comparatively late period the salmon fisheries in this river were of considerable value and importance. In 1761, no fewer than 260 fish were caught at one draught at Newburn; and, in 1775, 275 were landed at one draught at the Low Lights, near the mouth of the river. The fisheries have, however, for years past, been all but annihilated, a circumstance which has been variously accounted for, but which perhaps is most properly to be ascribed to the locks constructed at Bywell to improve the navigation of the river, preventing the ascent of the fish in the breeding season to the shallow streams in the upper parts of the river. For an account of the trade and shipping of this river the reader is referred to the articles **NEWCASTLE**, **SOUTH SHIELDS**, and **TYNEMOUTH**.

TYNEMOUTH and NORTH SHIELDS, a parl. bor., co. Northumberland, on the N. bank of the Tyne, at its mouth in the German Ocean, immediately opposite South Shields, 7 m. ENE. Newcastle, and 273 m. N. London by Great Northern railway. Pop. of parl. bor. 34,021, and of townships 16,560 in 1861. The parl. bor. consists of the townships of Tynemouth, N. Shields, Chirton, Preston, and Cullercoats. The township of Tynemouth occupies its most E. angle, and at its SW. extremity is the town of N. Shields. The township of Chirton stretches along the whole SW. side of the par. adjoining N. Shields. Preston adjoins both that town and the township of Tynemouth; it is of small extent, but contains some excellent houses, and a large pop. for its small area, as compared with some of the other townships. At the N. extremity of the township of Tynemouth is that of Cullercoats, which contains the fishing town of that name. This township comprises only about 5 or 6 acres of land, the greater part of which is covered with buildings. Tynemouth has been much enlarged of late years; it is in general well built, and, during the summer season, is much resorted to for bathing. Its most

remarkable edifice is the castle, originally a priory erected in the 11th century upon a previous foundation; it stands on ■ lofty and rocky peninsula, and is approached from the W. by a gateway flanked by towers, the whole being inclosed by ■ wall which runs for the most part along the edge of the cliff, at the NE. angle of which is a lighthouse. Great care is taken by government to preserve the remains of the edifice, which forms a sea-mark for ships approaching the harbour or navigating the coast. The ruins of the priory within consist of a turret, now serving as a barrack and other buildings converted into military magazines. These exhibit very fine specimens of monastic remains, and the parts now existing, which belonged to the E. end, and some other portions of the church, are of remarkably beautiful design. The style is early English, with considerable enrichment, and though the stone is much decayed, it shows great delicacy of execution. A monument has been erected in honour of Lord Collingwood. This church was parochial till 1657, when a new church was built near N. Shields. The living of Tynemouth, ■ vicarage, worth 298*l.* ■ year, is in the gift of the Duke of Northumberland, at whose cost several other churches have been erected.

North Shields has increased rapidly of late years in size and importance, along with the increasing trade of the Tyne. It has many good streets and squares, a good market-place, gas and water works, a public library, scientific institution, neat theatre, Lancastrian and other schools, a sailors' relief society, meeting-houses for most of the principal dissenting sects, and a weekly newspaper. The Master Mariners' Asylum, the site for which was granted by the Duke of Northumberland, is a neat stone edifice, built on the road leading from North Shields to Tynemouth. New docks, called the Northumberland Docks, 55 acres in extent, and with accommodation for 400 sail, have been made at Hay Hole, to the SW. of North Shields, opposite the Jarrow Docks. Tynemouth has a pier, of solid masonry, three-quarters of a mile in length, which, with another pier on the south side of the river, forms a harbour of refuge. There is a bar at the river's mouth, but at high water it may be crossed by vessels of 500 tons, and those of 300 tons lies close to the quays.

The town is included in the port of Newcastle, but there belong to it especially about 850 ships, and some business is done in ship-building. The entrance to the Tyne is defended by Clifford's Fort, on its NE. bank, near which is the low lighthouse, the high lighthouse being on the hill opposite Dockwray Square. The shipping of coal is the staple business of the port.

The town is under the jurisdiction of the co. magistrates. It is lighted and watched by commissioners under a local act. The erection of a bridge over the river was formerly contemplated; but that project has been abandoned, and the communication between the towns of North and South Shields is maintained by means of ■ steam ferry. The Reform Act conferred on the bor. of Tynemouth the privilege of returning 1 m. to the H. of C. Registered electors, 1,135 in 1865.

TYRE (*Typos*), the principal city of Phœnicia, and the most celebrated emporium of the ancient world, on the SE. coast of the Mediterranean, where the inconsiderable town of Tsour, with 1,500 inhabs., now stands, lat. 33° 17' N., long. 35° 14' 35" E. The harbour of the modern town is choked up, and the site represents nought but a dead memorial of the commerce, arts, and navigation of the Tyrians, the most distinguished mer-

Tyre was founded by a colony from Sidon, the most ancient of the Phœnician cities. The date of this event is not certainly known, but Larcher supposes it to have been 1,690 years before the Christian æra. (*Chronologic d'Hérodote*, cap. ii. p. 131.) It is singular that while Homer mentions Sidon, he takes no notice of Tyre, whose glory speedily eclipsed that of the mother city; but this is no conclusive proof that the latter was not then a considerable emporium. The prophets Isaiah, Jeremiah, and Ezekiel, who flourished from 700 to 600 years before Christ, represent Tyre as a city of unrivalled wealth, whose 'merchants were princes, and her traffickers the honourable of the earth.' Originally, the city was built on the main land; but having been besieged for a lengthened period by the Babylonian monarch Nebuchadnezzar, the inhabitants conveyed themselves and their goods to an island at a little distance, where a new city was founded, which enjoyed an increased degree of celebrity and commercial prosperity. The old city was, on that account, entitled Palætyre, and the other simply Tyre. The new city continued to flourish, extending its colonies and its commerce on all sides, till it was attacked by Alexander the Great. The resistance made by the Tyrians to that conqueror showed that they had not been enervated by luxury, and that their martial virtues were nowise inferior to their commercial skill and enterprise. The overthrow of the Persian empire was a less difficult task than the capture of this single city, which was not effected till a mound had been carried from the main land to the island on which it was built. The victor had not magnanimity to treat the vanquished as their heroic conduct deserved. In despite, however, of the cruelties inflicted on the city, she rose again to considerable eminence. But the foundation of Alexandria, by diverting the commerce that had formerly entered at Tyre into a new channel, gave her an irreparable blow; and she gradually declined till, consistently with the denunciation of the prophet, her palaces had been levelled with the dust, and she has become 'a place for the spreading of nets in the midst of the sea.'

Commerce and Colonies of Tyre.—Phœnicia was one of the smallest countries of antiquity. It occupied that part of the Syrian coast which stretches from Aradus (the modern Rouad) on the N., to a little below Tyre on the S., a distance of about 50 leagues. Its breadth was much less considerable, being for the most part bounded by Mount Libanus to the E., and Mount Carmel on the S. The surface of this narrow tract was generally rugged and mountainous; and the soil of the valleys, though moderately fertile, did not afford sufficient supplies of food to feed the pop. Libanus and its dependent ridges were, however, covered with timber suitable for ship-building; and, besides Tyre and Sidon, Phœnicia possessed the ports of Tripoli, Byblos, and Berytus. In this situation, occupying a country unable to supply them with sufficient quantities of corn, hemmed in by mountains, and by powerful and warlike neighbours, on the one hand, and having, on the other, the wide expanse of the Mediterranean, studded with islands, and surrounded by fertile countries, to invite the enterprise of her citizens, they were naturally led to engage in maritime and commercial adventures; and became the boldest and most experienced mariners, and the greatest discoverers, of ancient times.

From the remotest antiquity, a considerable trade seems to have been carried on between the eastern and western worlds. The spices, drugs, precious stones, and other valuable products of

Arabia and India have always been highly esteemed in Europe, and have exchanged for the gold and silver, the tin and wines of the latter. At the first dawn of authentic history, we find Phœnicia the principal centre of this commerce. Her inhabs. are designated in the early sacred writings by the name of Canaanites,—a term which, in the language of the East, means merchants. The products of Arabia, India, and Persia were originally conveyed to her by companies of travelling merchants, or caravans; which seem to have been constituted in the same way, and to have performed exactly the same part in the commerce of the East, in the days of Jacob, that they do at present. (*Gen. xxxvii. 25.*) At a later period, however, in the reigns of David and Solomon, the Phœnicians, having formed an alliance with the Hebrews, acquired the ports of Elath and Eziongeber, at the NE. extremity of the Red Sea. Here they fitted out fleets, which traded with the ports on that sea, and probably with those of Southern Arabia, the W. coast of India, and Ethiopia. The ships are said to have visited Ophir; and a great deal of erudition has been expended in attempting to determine the exact situation of that emporium of the country. But most historians agree with Heeren, that it was not the name of any particular place, but that it was a sort of general designation given to the coasts of Arabia, India, and Africa, bordering on the Indian Ocean; somewhat in the same way as the terms East and West Indies are now used. (See the chapter on the Navigation of the Commerce of the Phœnicians, in the translation of Heeren's work.)

The distance of the Red Sea from Tyre being very considerable, the conveyance of goods from the one to the other by land must have been tedious and expensive. To lessen this inconvenience, the Tyrians, shortly after they got possession of Elath and Eziongeber, seized upon Rhinoculura, the port in the Mediterranean nearest to the Red Sea. The products of Arabia, India, &c., being carried thither by the most compendious route, were then put on board ships, and conveyed by a brief and easy voyage to Tyre. Except the transit by Egypt, this was the shortest and most direct, and for that reason, no doubt, the cheapest, channel by which the commerce between Southern Asia and Europe could then be conducted. But it is not believed that the Phœnicians possessed any permanent footing on the Red Sea after the death of Solomon. The want of it does not, however, seem to have sensibly affected their trade; and Tyre continued, till the foundation of Alexandria, to be the grand emporium for Eastern products, with which it was supplied by caravans from Arabia, the bottom of the Persian Gulf, and from Babylon, by way of Palmyra.

The commerce of the Phœnicians with the countries bordering on the Mediterranean was still more extensive and valuable. At an early period they established settlements in Cyprus and Rhodes. The former was a very valuable acquisition, from its proximity, the number of its ports, its fertility, and the variety of its vegetable and mineral productions. Having passed successively into Greece, Italy, and Sardinia, they proceeded to explore the southern shores of France and Spain, and the northern shores of Africa. They afterwards ventured upon the Atlantic, and were the first people whose flag was displayed beyond the Pillars of Hercules.

Of the colonies of Tyre, Gades, now Cadiz, was one of the most ancient and important. It is supposed by M. de St. Croix to have originally

been distinguished by the name of Tartessus or Tarshish, mentioned in the sacred writings. (*De l'Etat et du Sort des Anciennes Colonies*, p. 14.) Heeren, on the other hand, contends, as in the case of Ophir, that by Tarshish is to be understood the whole southern part of Spain, which was early occupied and settled by Phœnician colonists. (See also Huet, *Commerce des Anciens*, cap. 8.) At all events, however, it is certain that Cadiz early became the centre of a commerce that extended all along the coasts of Europe as far as Britain, and perhaps the Baltic. There can be no doubt that by the Cassiterides, or Tin Islands, visited by the Phœnicians, is to be understood the Scilly Islands and Cornwall. The navigation of the Phœnicians, probably, also extended a considerable way along the western coast of Africa; of this, however, no details have reached us.

But of all the colonies founded by Tyre, Carthage has been by far the most celebrated. It was at first only a simple factory, but was materially increased by the arrival of a large body of colonists, forced by dissensions at home to leave their native land, about 883 years B. C. (*St. Croix*, p. 20.) Imbued with the enterprising mercantile spirit of their ancestors, the Carthaginians rose in no very long period to the highest eminence as a naval and commercial state. The settlements founded by the Phœnicians in Africa, Spain, Sicily, &c., gradually fell into their hands; and, after the destruction of Tyre by Alexander, Carthage engrossed a large share of the commerce of which it had previously been the centre. The history, commerce, and institutions of Carthage, and the misfortunes by which she was overwhelmed, have, however, been already noticed in this work (see *CARTHAGE*); and we shall only, therefore, observe, that commerce, instead of being, as some shallow theorists have imagined, the cause of her decline, was the real source of her power and greatness; the means by which she was enabled to wage a lengthened, doubtful, and desperate contest with Rome herself for the empire of the world.

The commerce and navigation of Tyre probably attained their maximum from 650 to 550 years B. C. At that period the Tyrians were the factors and merchants of the civilised world, and they enjoyed an undisputed pre-eminence in maritime affairs. The prophet Ezekiel (chap. xxvii.) has described in magnificent terms the glory of Tyre, and has enumerated several of the most valuable productions found in her markets, and the countries whence they were brought. The fir trees of Senir (Hermon), the cedars of Lebanon, the oaks of Bashan (the country to the E. of Galilee), the ivory of the Indies, the fine linen of Egypt, and the purple and hyacinth of the isles of Elishah (Peloponnesus), are specified among the articles used for her ships. The inhabitants of Sidon, Arvad (Aradus), and Gebel (Byblos) served her as mariners and carpenters. Gold, silver, lead, tin, iron, and vessels of brass; slaves, horses, mules, sheep, and goats; pearls, precious stones, and coral; wheat, balm, honey, oil, spices, and gums; wine, wool, and silk; are mentioned as being brought into the port of Tyre by sea, or to its markets by land, from Syria, Arabia, Damascus, Greece, Tarshish, and other places, the exact site of which it is difficult to determine. There is, in Dr. Vincent's *Commerce and Navigation of the Ancients in the Indian Ocean* (vol. ii. pp. 624-652), an elaborate and (like the other parts of that work) prolix commentary on this chapter of Ezekiel, in which most of the names of the things and places mentioned are satisfactorily explained. (See also Heeren on the Phœnicians, cap. iv.)

Such, according to the inspired writer, was Tyre, the 'Queen of the waters,' before she was besieged by Nebuchadnezzar. But, as has been already remarked, the result of that siege did not affect her trade, which was as successfully and advantageously carried on from the new city as from the old. Inasmuch, however, as Carthage soon after began to rival her as a maritime and mercantile state, this may, perhaps, be considered as the æra of her greatest celebrity. It would not be easy to overrate the beneficial influence of that extensive commerce from which the Phœnicians derived such immense wealth. It inspired the people with whom they traded with new wants and desires, at the same time that it gave them the means of gratifying them. It everywhere gave fresh life to industry, and a new and powerful stimulus to invention. The rude, uncivilised inhabs. of Greece, Spain, and Northern Africa, acquired some knowledge of the arts and sciences practised by the Phœnicians; and the advantages of which they were found to be productive secured their gradual though slow advancement.

Nor were the Phœnicians celebrated only for their wealth, and the extent of their commerce and navigation. Their fame, and their right to be classed amongst those who have conferred the greatest benefits on mankind, rest on a still more unassailable foundation. Antiquity is unanimous in ascribing to them the invention and practice of all those arts, sciences, and contrivances that facilitate the prosecution of commercial undertakings. They are held to be the inventors of arithmetic, weights and measures, of money, of the art of keeping accounts, and, in short, of everything that belongs to the business of a counting-house. They were, also, famous for the invention of ship-building and navigation; for the discovery of glass; for their manufactures of fine linen and tapestry; for their skill in architecture, and in the art of working metals and ivory; and, still more, for the incomparable splendour and beauty of their purple dye. (See the learned work of the President de Goguet, *Sur l'Origine des Loix*, Eng. trans., vol. i. p. 296, and vol. ii. pp. 95-100; see also the chapter of Heeren on the Manufactures and Land Commerce of the Phœnicians.)

But the invention and dissemination of these highly useful arts form but a part of what the people of Europe owe to the Phœnicians. It is not possible to say in what degree the religion of the Greeks was borrowed from theirs; but that it was, to a pretty large extent, seems abundantly certain. Hercules, under the name of Melcarthus, was the tutelar deity of Tyre; and his expeditions along the shores of the Mediterranean, and to the straits connecting it with the ocean, seem to be merely a poetical representation of the progress of the Phœnician navigators, who introduced arts and civilisation, and established the worship of Hercules, wherever they went. The temple erected in honour of the god at Gades was long regarded with peculiar veneration.

The Greeks were, however, indebted to the Phœnicians, not merely for the rudiments of civilisation, but for the great instrument of its future progress—the gift of letters. No fact in ancient history is better established than that a knowledge of alphabetic writing was first carried to Greece by Phœnician adventurers; and it may be safely affirmed, that this was the greatest boon any people ever received at the hands of another.

Before quitting this subject, we may briefly advert to the statement of Herodotus with respect to the circumnavigation of Africa by Phœnician sailors. The venerable father of history mentions,

that ■ fleet fitted out by Necho, king of Egypt, but manned and commanded by Phœnicians, took its departure from a port in the Red Sea, at an epoch which is believed to correspond with the year 604 before the Christian era, and that, keeping always to the right, they doubled the southern promontory of Africa; and returned, after a voyage of 3 years, to Egypt, by the Pillars of Hercules. (Herod., lib. iv. § 42.) Herodotus further mentions, that they related that, in sailing round Africa, they had the sun on their right hand, or to the north—a circumstance which he frankly acknowledges seemed incredible to him, but which, as everyone is now aware, must have been the case if the voyage were actually performed.

Many learned and able writers, and particularly Gosselin (*Recherches sur la Géographie Systématique et Positive des Anciens*, tome i. pp. 204–217), have treated this account as fabulous. But the objections of Gosselin have been successfully answered in an elaborate note by Larcher (*Herodote*, tome iii. pp. 458–464, ed. 1802); and Major Rennell has sufficiently demonstrated the practicability of the voyage. (*Geography of Herodotus*, p. 682.) Without entering upon this discussion, it may be observed, that not one of those who question the authenticity of the account given by Herodotus presume to doubt that the Phœnicians braved the boisterous seas on the coast of Spain, Gaul, and Britain; and that they had, partially at least, explored the Indian Ocean. But the ships and seamen that did this much might undoubtedly, under favourable circumstances, double the Cape of Good Hope. The relation of Herodotus has, besides, such an appearance of good faith, and the circumstance, which he doubts, of the navigators having the sun on the right, affords so strong a confirmation of its truth, that there really seems no reasonable ground for doubting that the Phœnicians preceded, by 2,000 years, Vasco de Gama in his perilous enterprise.

TYROL and VORARLBERG (an. *Rætia*, with part of *Noricum*), a prov. of the Austrian empire, principally between the 46th and 48th degrees of N. lat., and the 10th and 13th of E. long.; having E. the archd. of Austria and Carinthia; S. the Lombardo-Venetian kingdom; W. Switzerland and the princip. of Liechtenstein; and N. Bavaria. Length, E. to W., about 120 m.; average breadth somewhat less than 100 m. Area, 509 Austrian, or about 11,000 sq. m. Pop. 216,016 in 1857. This country may be regarded as an extension of Switzerland towards the E. It is traversed in its whole extent by the main ridge of the Alps, which has here some of its loftiest summits, including, among others, Mount Orteler, 12,823 ft., and the Gross Gluckner 12,567 ft. above the level of the sea. This grand chain separates the waters that flow N. to the Rhine and the Upper Danube from those that flow S. to the Po and the Adriatic, and the Lower Danube. But, exclusive of this gigantic chain, an inferior chain, from 50 to 60 m. S. of the latter, divides the country into three portions: the Valley of the Inn, to the N. of the High Alps; that of the Drave, between the High Alps and the inferior chain; and the country to the S. of the latter drained by the Adige, Piave, and other rivers flowing into the Adriatic. The Vorarlberg, NW. from the Tyrol, forms part of the basin of the Rhine, being drained by the Ill and Bregenz, and bounded on the NW. by the Lake of Constance. There are many small lakes in the country, but none of any consequence; the Achensee, in the S., is the principal. The climate is various. To the N. of the High Alps, and in the inter-

mediate district, or valley of the Drave, it is very severe. Some very extensive mountain tracts are covered with immense glaciers and the accumulated snows of ages. The medium temperature of the year at Innsbruck is about 50°; at Botzen, or Bolzano, 57° Fahr. But the narrow valleys in the S., which unite with the plain of Lombardy, are very hot in summer; and frequently, indeed, experience the sirocco. In general, the spring and summer are wet, and autumn is the most agreeable season.

The central chain of the Alps is composed chiefly of granite, flanked on either side with a zone of slate, overlapped by limestone: the accompanying ranges on both the N. and S. sides are mostly calcareous. Estimating the total extent of land in the prov. at about 7,000,000 acres, it has been distributed as follows: viz. cultivated or arable land, 536,520 acres; vineyards, 78,636 do.; meadows and gardens, 615,620 do.; commons, 922,593 do.; and forests, 2,767,496 do., making in all 4,920,873 acres; leaving, consequently, above 2,000,000 acres of land occupied by inaccessible mountains, glaciers, and snow-tracts. The products and husbandry in the S. are much the same as in the N. parts of Lombardy. In other parts of the Tyrol, maize, wheat, and pulse are grown in the bottoms, and scanty crops of buckwheat, rye, and oats on the mountain sides; but the produce of corn is insufficient for the consumption. The Tyrol is in fact, like the greater part of Switzerland, a pastoral country, the chief wealth of its inhabs. consisting in their cattle and other live stock. The cattle are kept in the valleys throughout the winter, but are in spring driven to the uplands, proceeding higher and higher as the lower meadows become exhausted and the upper divested of snow, and returning again in September. The meadows yielding the thickest grass are set aside for a hay crop. The hay, when cut, is carefully dried under cover, and stored up in sheds; but it is quite insufficient for the winter supply of the cattle, many of which have to be fed on maize stalks and ash leaves. In the circle of Roveredo, and other parts of the country adjoining Italy, a good many silk-worms are reared; and the annual average produce of silk is estimated at 3,200 centners. The rearing of canary-birds, though apparently an insignificant branch of industry, is extensively carried on at Imst, and other places in the valley of the Inn; and the Tyrol supplies most parts of Europe with these songsters. Among the wild animals are wolves, wild boars, and bears: the clefts of the rocks afford shelter to the marmots; and the chamois finds refuge on the highest summits, or in places secure from the approach of the hunter.

The precious metals and copper are met with, but they are of little importance. Iron and salt are abundant in certain districts, and though mining industry is in a rather backward state, are produced in considerable quantities. Silk is manufactured in the S.; next to which, iron wire, plates, nails, and other kinds of hardware are the principal products. Leather, linen fabrics, wooden articles (some of which are executed with great skill, and display much ingenuity), glass, paper, toys, and some cotton goods, are produced. But the principal exports are cattle, cheese, silk, iron, salt, wine, timber, tobacco, and other raw produce, in return for corn and most sorts of manufactured goods. The inhabs. are exceedingly industrious, ingenious, and inventive; but the poverty of the country obliges them, notwithstanding, to migrate in great numbers; and several thousands annually leave their homes for Swabia, Bavaria, Italy, and more distant countries, where they exercise various

functions, and continue for a longer or shorter time till, by dint of economy, they have saved what they suppose will maintain them at home, when they immediately return. A considerable transit trade is carried on across the Tyrolean Alps, between Italy and the S. parts of Germany. The principal route for this trade formerly was the old road over the Brenner pass, between Innsbruck and Brixen, and thence to Bolzano and Roveredo; but in recent years this route has been superseded by the railway from Innsbruck to Roveredo. At its highest point the railway attains to an elevation of 4,634 ft. At the W. extremity of the Tyrol is the famous military road over Monte Stelvio, rising to the height of 8,960 ft. above the sea, being the highest elevation of any carriage road in Europe.

The Tyrol is divided into seven circles, their chief towns being Botzen, Schwartz, Imst, Bruneck, Trent, Roveredo, and Bregenz; in each of which is a court of justice. Like the other divisions of the Austrian empire, the Tyrol has its provincial diet, competent to make local laws. Innsbruck is the general cap. and the seat of the highest judicial tribunal. The pop. is almost wholly R. Catholic, under the superintendence of ten bishops subordinate to the archbishop of Salzburg.

The character of the Tyrolean is said to contrast favourably with that of the Swiss. In the N. or German portion of the country they are neither so calculating nor mercenary as the latter; and in the S. they approach the Italian standard in their manners and disposition as well as their language. Though quite as attached to personal and national liberty as the Swiss, the Tyroleans have always been steadfast adherents of Austria; and, next to the archduchy, the Tyrol may be depended upon as the prov. most likely to remain firmly attached to the House of Hapsburg in the event of any future dismemberment of the empire. But the Austrians draw little or no disposable military force from the Tyrol. Its inhabs. form an irregular militia, and act with the greatest vigour and alacrity in the defence of their country; but their natural repugnance to a disciplined military life is so great, that all attempts to extend the conscription to this prov. have proved more or less unsuccessful. Of late, indeed, a part of the regiment of *Jägers*, raised in the Tyrol for its own defence, has been removed into another prov.; but this measure appears to have produced much dissatisfaction.

The dress of the peasantry is peculiar. The principal finery of the men consists of a straw hat ornamented with ribands and nosegays: the dress of the women consists of a thick and short gown, stockings with cross stripes, and a cap tapering in the shape of a sugar-loaf. Music and dancing, rifle-shooting and athletic exercises, are the favourite amusements of the Tyroleans; in all which they excel.

From the fall of the Roman empire, this region ceased to be permanently united under one head till 1288; not long after which period it passed by inheritance to the dukes of Austria, to whose descendants it has ever since belonged, with the exception of the period from 1806 to 1814. From 1806 to 1809 it belonged to Bavaria. The government of the Bavarians was, however, very disturbed; and the Tyroleans under Hofer maintained a doubtful contest with them and the French till 1801; when Hofer, having been taken and shot at Mantua, the Tyrol was governed

by the French till 1814, when it reverted to Austria.

TYRONE, an inland co. of Ireland, prov. Ulster, having N. Londonderry, E. Lough Neagh and Armagh, S. Monaghan and Fermanagh, and W. Donegal. It contains 754,395 acres, of which 171,314 are unimproved mountain and bog, and 27,261 water, being a fraction of Lough Neagh. Surface in many places, especially on the N. and W., rough and mountainous; but there is, notwithstanding, a large extent of fertile land. Property mostly in very large estates. Farms of various sizes; those in the mountainous districts large, and seldom much subdivided. Tillage farms small, and generally held under partnership leases; and it is almost needless to add that, wherever this is the case, agriculture is execrable. A great deal of work is done by the spade; and, where ploughs are used, they are sometimes drawn by horses, bullocks, and milch cows, all yoked together. Potatoes and oats the principal crops. Cattle and sheep very inferior. Habitations of the bulk of the people extremely mean: they live principally on oatmeal and potatoes, rarely tasting butcher's meat. Linen manufacture generally diffused. A coal mine is wrought between Dunganon and Stewartston, but the coal is inferior. There is a good pottery near Dunganon. This is one of the counties in which illicit distillation was most prevalent. Principal rivers, Blackwater, Foyle, Ballinderry, with several others of inferior importance. Tyrone contains 4 baronies and 85 parishes; and returns 3 mems. to the H. of C., being 2 for the co., and 1 for the bor. of Dunganon. Registered electors for the co., 8,421 in 1865. At the census of 1861 the co. had 44,577 inhab. houses, 46,722 families, and 238,500 inhabs.; while, in 1841, Tyrone had 54,919 inhab. houses, 57,337 families, and 312,956 inhabs.

TYS DRUS, or TYS DRA, an ancient and considerable, but now ruined, city of N. Africa, reg. of Tunis, at present represented by the inconsiderable village of El Jemme, 110 m. S. by E. Tunis, and 30 m. W. by S. the port of Mehadiab, or Africa. The walls of the ancient town may still be distinctly traced, and it comprises, besides the foundations of temples and other buildings, the mutilated fragments of columns and statues. But the distinguishing feature of the place, and that which gives it all its present interest, is its superb amphitheatre. This noble ruin, the exterior of which is in a high state of preservation, is of vast size and magnificence, being 429 ft. in length by 368 ft. in breadth, and 96 ft. in height, so that it is inferior only, in respect of magnitude, to the Colosseum and the amphitheatre of Verona. It consisted originally of 64 arches, and 4 rows of columns of the Composite order, placed above each other. At each extremity was a grand entrance; but one of these, with an arch on either side, was destroyed, about a century ago, by one of the beys of Tunis, to prevent the ruin being occupied as a fortress by his rebellious subjects. The arena is nearly circular. There are no inscriptions by which we may learn the date or founders of this magnificent structure; but Dr. Shaw (Travels, p. 117) supposes, from its similarity to other structures of the same period, that it is of the age of the Antonines; and as the elder Gordian was proclaimed emperor in Tysdrus, he concludes that he may, probably out of gratitude to the citizens, have presented them with this grand structure for the celebration of those barbarous sports then so much in fashion.



U.

UDINE

UDINE, a town of Northern Italy, cap. deleg. Udine or Friuli, on the Roja, 60 m. NE. Venice, on the railway from Venice to Trieste. Pop. 25,291 in 1857. The town is fortified and well built, but, from its situation in a wide and level plain, its external appearance has nothing striking. Its streets are lined with arcades; and in the great square is a fine monument in commemoration of the treaty of Campo Formio (which village is in the immediate neighbourhood). Principal buildings, the cathedral, with some handsome marble columns and bas reliefs, two par. churches, the chief guard house, surmounted by a tower and two iron figures to strike the hours, the town-hall, bishop's palace, and a good opera-house. The old castle, on elevated ground in the middle of the town, is now a prison. The French, during their occupation, constructed several public walks, and otherwise embellished the town. Udine is the seat of the provincial assembly and superior courts, and has a lyceum, 2 gymnasia, a high school, episcopal seminary and library, a society of agriculture, several hospitals, and asylums. The inhabs. are principally engaged in the silk trade, but they also manufacture linen fabrics, leather, paper, and liqueurs.

UIST, NORTH AND SOUTH. See **HEBRIDES**.

ULEABORG, a town and sea-port of Finland, cap. lin. or district of its own name, on a peninsula, at the mouth of the Ulea in the Gulf of Bothnia, 68 m. SSE. Tornea. Pop. 7,018 in 1858. The town is regularly built, and is, after Åbo, the principal commercial town of the prov. Its harbour is however, in great part, choked up with sand. The chief exports are pitch, tar, fish, and salted butter. It was founded in 1605, and has frequently suffered from fire, by which it was nearly destroyed on May 25, 1822.

ULM, a frontier town of Württemberg, cap. circ. Danube, on the Danube, where it begins to be navigable, 45 m. SE. Stuttgart, and 41 m. W. by N. Augsburg, on the railway from Stuttgart to Augsburg. Pop. 22,736 in 1861. The town has an antiquated appearance, and, though it has some traffic, it is dull. The cathedral, a fine Gothic building, has an unfinished tower, 337 Germ. ft. in height. The body of the building is 416 ft. in length, 166 ft. in breadth, the nave being 152 ft. in height, so that it is larger than any other church in Germany, except the cathedral of Cologne. This edifice was erected, between 1377 and 1494, at the sole expense of the citizens of Ulm. It has some beautiful stained glass and carved work, and a tablet commemorating a showman's feat of the Emperor Maximilian, in 1492, who is said to have stood on the parapet of the tower, on one foot, balancing a coach-wheel with the other. Several other buildings are worthy of notice, as the town-hall, government and custom houses, corn-hall, and arsenal. Ulm has a gymnasium, a large and richly endowed hospital, a female orphan asylum, and the house of correction for the circle. Tobacco pipe-bowls, linen fabrics, leather, paper, and vinegar are made by the inhabs., many of whom also engage in horticulture, boat-building, the transit of goods, and the rearing of snails for export to Bavaria and Austria. Large quantities of Rhenish, Swiss, and other wines are brought thither to be shipped down the Danube.

Ulm was formerly strongly fortified, and a military post of importance.

In 1805, Ulm was the theatre of some important military events. Austria having declared war against France, pushed forward a strong army into Bavaria, under General Mack, who established his head-quarters at Ulm. But Napoleon having succeeded, by a series of masterly manoeuvres, in cutting off Mack's communications with Austria, the latter was cooped up in the city with all that portion of his army, amounting to about 26,000 men, that had not already fallen into the hands of the French. Considering the strength of the place, and the numbers of the garrison, a vigorous resistance might have been anticipated; but, instead of this, Mack capitulated on the 17th of October, and delivered up the town, and his army as prisoners of war, without firing a shot.

ULSTER, one of the provinces into which Ireland is divided, and the most northerly, comprising the cos. of Donegal, Londonderry, Antrim, Tyrone, Fermanagh, Monaghan, Armagh, Down, and Cavan.

ULVERSTONE, a market town and par. of England, hund. Lonsdale, co. Lancaster, about 2 m. from the W. side of the embouchure of the Leven in Morecambe Bay, on a tract apparently abandoned by the sea, 14 m. NW. Lancaster. Area of par. 29,100 acres. Pop. of par. 11,464, and of town, 6,630 in 1861. Of late years the town has greatly improved: it has now a neat theatre, two subscription libraries, news and assembly rooms; and, besides the par. church, several other churches. The par. church is a handsome modern structure, in the style that prevailed in the time of Henry VIII., with a good altar-piece of the Descent from the Cross, and an E. window of stained glass. There are also meeting-houses for Dissenters, and some public schools of a minor kind. In 1795 a canal was cut from the river Leven, by which vessels of 400 tons reach a large basin, and load or unload close to the town. The inhabs. principally manufacture cotton goods and canvass hats, and are occupied in conveying coastwise copper and iron ore, limestone, corn, and slates, the latter being exported in large quantities. Ulverstone belongs to the port of Lancaster. It is the seat of petty sessions for the hundred, and of a county court.

UNITED STATES (THE), a federal republic of N. America, and the leading state on the American continent, ranking immediately after the great powers of Europe. The U. States claim the sovereignty over a vast portion of the N. American continent, stretching from the Atlantic on the E. to the Pacific on the W., between the British territories on the N. and those of Mexico on the S., and included within the 25th and 49th degs. of N. lat., and the 65th and 125th of W. long., comprising in all an area of above 3,000,000 sq. miles. But large portions of this vast territory have not yet been divided into states, and scarcely explored; though from the wonderful increase of population, and the rapid extension of civilisation, it is all but certain that, in no very lengthened period, the entire country from the Atlantic to the Pacific will be distributed into states, and occupied by a people of whom it would be difficult to exaggerate the intelligence and the enterprise.

Physical Geography.—The entire territory be-

longing to the U. States is divided into four great regions: 1st, the Atlantic slope; 2nd, the vast basin of the Mississippi and Missouri; 3rd, the country between the Rocky Mountains and the Sierra Nevada; and, 4th, the Pacific slope. These divisions are formed by three mountain ranges—the Appalachian chain towards the E., the Rocky Mountains in the centre, and the Sierra Nevada on the W. The Appalachian or Alleghany chain is more remarkable for length than height; it extends from the state of Mississippi, NE., through the states of Alabama, Georgia, Tennessee, N. Carolina, Virginia, Pennsylvania, New York, and Vermont, for about 1,200 m., at a variable distance of from 70 to 300 m. from the Atlantic, and consists of several parallel ranges of an average aggregate breadth of about 100 m. The mean height of the Alleghanies is not more than from 2,000 to 3,000 ft., about half of which consists of the elevation of the mountains above the adjacent plain, and the rest of the elevation of the latter above the sea. The White Mountains, in New Hampshire, which belong to this chain, reach a height of above 7,000 ft. The Black Mountain, in N. Carolina, is said to rise 6,476 ft. above the sea; and other summits reach 6,000 ft. and upwards. The Rocky Mountains are a prolongation of the great Mexican Cordillera. Their average height may be about 8,500 ft. above the ocean, but some of their summits attain to from 12,000 to nearly 15,000 ft. About 10 or 12 deg. W. from the Rocky Mountains is the great coast chain of the Sierra Nevada, or Snowy Mountains, which extends, under different names and with different altitudes, from the peninsula of California to Russian America. It is of still greater elevation than the Rocky Mountains; some of its passes (within the U. States) being about 9,000 ft., and some of its summits 15,500 ft. above the level of the sea. The region between these two vast mountain ranges comprises the eastern and most extensive and sterile portion of Oregon; the great inland basin of Upper California, elevated from 4,000 to 5,000 ft. above the Pacific, and mostly a desert; and the country drained by the great river, the Colorado, and its affluents. W. of the Sierra Nevada is the Pacific slope.

The country extending from the Atlantic nearly to the E. bank of the Mississippi was, in its native state, almost covered by a continuous forest; and the greater part of it still remains in the same primitive condition. The portion of the basin of the Mississippi and Missouri, on their right bank, is by far the most extensive. It comprises, 1st, a tract of low, flat, alluvial, and well-wooded land, lying along the rivers, and stretching inwards from 100 m. to 200 m. or more; and, 2nd, the prairie and wild region, extending from that last mentioned by a pretty equal ascent, to the Rocky Mountains. The prairies are of immense extent; but they are not, as is commonly supposed, level. Their surface, on the contrary, is rolling or billowy, sometimes swelling into very considerable heights. They are covered with long rank grass, being interspersed in Texas and the S. States with clumps of magnolia, tulip, and cotton trees, and in the N. States with oak and black walnut. The prairies gradually diminish in beauty and verdure as they stretch towards the W., and become more elevated, till at length they imperceptibly unite with and lose themselves in a desert zone or belt skirting the foot of the Rocky Mountains. In the S. this desert belt is not less than from 400 m. to 500 m. in width, but it diminishes in breadth in the more northerly latitudes. It is, in most respects, similar to the sandy sterile deserts of Cen-

tral Asia. This sterility is also, as already stated, characteristic of a large portion of the extensive territory between the Rocky Mountains and the Sierra Nevada. The Pacific slope, comprising the country W. of the Sierra Nevada, includes maritime California, so famous for its minerals, and the best and most fertile portion of the Oregon territory. Like the Atlantic coast it is, for the most part, heavily timbered. (Darby's U. States, p. 358; Humboldt's Views of Nature.)

Rivers.—The rivers of the U. States are of prodigious magnitude and importance. Of those flowing S. and E. the principal are the Mississippi and Missouri, which, with their tributaries, the Ohio, Arkansas, and Red River, give to the interior of the United States an extent of inland navigation, and a facility of communication, unequalled, perhaps, and certainly not surpassed, in any other continent. The Alabama and Appalachicola flow, like the Mississippi, into the Gulf of Mexico; the Alatomaha, Savannah, Roanoke, Potomac, Susquehanna, Delaware, Hudson, Connecticut, and Penobscot into the Atlantic; and the Oswego, Cuyahoga, and Maumee into the great lakes of the St. Lawrence basin. Of the rivers which have their sources W. of the ridge of the Rocky Mountains, and their embouchure in the Pacific, or in some of its arms, the principal are the Columbia, which falls into the Pacific; the San Joaquin and Sacramento, which fall into the great bay of San Francisco; and the Colorado, which, with its tributaries, after draining a vast extent of country, falls into the Gulf of California.

Next to the great Lakes SUPERIOR and MICHIGAN, in the basin of the St. Lawrence, noticed in separate articles, the largest lake within the limits of the U. States is the Great Salt Lake, in E. California, in the territory of Utah, in about 41° N. lat. and 113 W. long. Lake Champlain, between New York and Vermont, is also of considerable dimensions. Numerous small lakes occur in N. York, Maine, and especially in Wisconsin and the Minnesota territory.

The coast of the Atlantic is indented by many noble bays, as those of Passamaquoddy, Massachusetts, Delaware, and Chesapeake; and several extensive and sheltered inlets are formed by the islands off the coast, the principal of which are Long Island Sound, near New York, and Albemarle and Pamlico Sounds, in N. Carolina. The coast of the Gulf of Mexico has, also, many valuable inlets and back waters; and there are some, though fewer, on the shores of the great lakes. The great bay of San Francisco, in California, on the Pacific, is one of the finest basins anywhere to be met with. Altogether, the United States are furnished with some of the best harbours in the world.

Climate.—In a country extending through 24 degrees of lat., and nearly 60 of long., the climate must, of necessity, vary considerably. In the N., along the British frontier, the winter is very severe: during this season the snow is sufficiently abundant in the N. England states to admit the use of sledges, and the ice on the rivers strong enough to bear the passage of horses and waggons. In summer, on the contrary, the heat is proportionally oppressive. As far south as New York, Pennsylvania, and New Jersey, the thermometer falls in winter below zero; rising, in summer, to nearly 100° Fahr. The climate of the Atlantic coast, between the 41st and 45th degrees of lat., is colder in winter, and warmer in summer, by nearly 10 degrees, than the parts of Europe under the same parallels; and even at New Orleans, where the summer heats are intense, a winter seldom passes

without frost. Snow, however, rarely falls further S. than lat. 30°, nor is it often seen S. of the Potomac river, except on mountains. The mean annual temp. of Albany is about 49° Fahr.; of Philadelphia, 51°; of New York and Cincinnati, nearly 54°; of Natchez, 65°; and of Cantonment Brooke, in Florida, 72°. The prevalent winds are from the NW., SW., and SE. The first is by far the driest and coldest, and predominates in winter. The second prevails throughout the basin of the Mississippi for most part of the year, except during about 2 months of the winter season. The NE. wind brings moisture, particularly in the N. part of the Union. The rains are much heavier than in most parts of Europe, resembling rather the torrents of tropical countries. The mean annual fall of rain in the United States (E. of Mississippi) is about 37½ inches; that of NW. Europe amounted to 31·32 inches; but evaporation is quicker, and there are more dry days in the year in the United States than in Great Britain.

The temperature in the country along the Pacific is a good deal higher than along the corresponding latitudes on the E. coast. The year is divided into two seasons; the wet, extending from April to November, and the dry. In the former, the rains, though not by any means continuous, are frequent and heavy. In the S. parts of the coast the dry season commences sooner and continues longer than in those more to the N.

Vegetable Products.—The forests of the E. section of this great territory comprise 140 different kinds of trees, of which 80 are said to attain the height of 60 ft. and upwards. Among them are numerous species of oak, ash and pine, the hickory and tulip tree, American cypress, and plane, several magnolias, and walnuts. In respect of its vegetable products, the country, E. the Rocky Mountains, may be divided into the following regions:—

| Regions | Products |
|------------------------------------|---|
| Northern : N. of lat. 44° | Birch, American elm, red and white pine, numerous willows, sugar, and other maples; many herbaceous plants common to N. Europe and Siberia: few climbing or peculiar aquatic plants. |
| Middle: from lat. 44° to 35° | Numerous oaks, hickory, and ash trees, W. plane, white cedar, fewer willows, saffrass, witch hazel, red maple, yellow birch, more climbing and herbaceous plants, and many fine flowering aquatics. |
| Southern : from lat. 35° to 27° | Many of the foregoing, deciduous cypress, Carolina poplar, Magnolia grandiflora, live oak, swamp hickory; very many climbing, herbaceous, and aquatic plants. S. of lat. 27° the character of N. America merges in that of tropical vegetation. |

Apples, pears, cherries, and plums flourish in the N.; pomegranates, melons, figs, grapes, olives, almonds, and oranges, in the S. section. Maize is grown from Maine to Louisiana, and wheat throughout the Union; tobacco as far N. as about lat. 40°, and in the W. States S. of Ohio. Cotton is not much raised N. of 37°, though it grows to 39°. Rice is cultivated in Carolina, Georgia, Louisiana, and as far N. as St. Louis in Missouri. The sugar-cane grows as high as 33°, but does not thoroughly succeed beyond 31° 30'. The

vine and mulberry tree grow in various parts of the Union; oats, rye, and barley in all the N. and the mountainous parts of the S. states; and hemp, flax, and hops, in the W. and middle states. The cultivation of these crops will be treated of hereafter.

The *animal kingdom* comprises the buffalo (*Bos Americanus*), and the musk ox (*Bos moschatus*). The former, though its numbers have of late years been greatly reduced, is still found in the boundless prairies W. of the Mississippi in very large herds. Among the other quadrupeds are the moose, or American elk (*Cervus alces*), the prong-horned antelope, peculiar to N. America; the Virginian deer, cougar, black and grisly bears, American fox (*Vulpes fulvus*), racoon, opossum, beaver, skunk, and glutton. Among the birds are the white-headed eagle, several vultures, and a great many birds common to the whole world, though few of the wading species resemble those of Europe. The alligator (*Croc. lucius*) is a native of the S. states, but does not occur N. of the Carolinas and the Red River. The rattle-snake is among the serpents of the United States, and the siren is a native of the muddy pools of Georgia and Carolina. Cod, mackerel, and salmon abound on the shores; and shell-fish are particularly abundant in the rivers of the Mississippi basin. The domestic animals of the states are the same as in Europe.

Geology and Minerals.—The White Mountains consist of granite, which is also very prevalent in the greater part of New Hampshire and Maine. The Rocky Mountains and the Sierra Nevada consist principally of granite intermixed with volcanic matter. Sienite, porphyry, and greenstone occur in the NW. part of the Appalachian chain; gneiss forms the upper regions in New York and New Jersey; most of the mountain summits S. of the Juniata river consist of feucoidal sandstone; and talcose mica, chlorite, and other slates, with crystalline limestone and serpentine, lie along the W. side of the primary belt, in the middle and S. parts of the Union. Blue limestone, red sandstone, shales, anthracite, coal-measures, and other transition formations, flank these rocks in many places. Secondary strata occupy by far the largest portion of the U. States; but no strata corresponding in date with the new red sandstone or oolitic groups of Europe appear to be present. Tertiary formations, many of which abound with fossil remains, have been found in many parts of the Atlantic slope, in Alabama, and in the S. part of the Mississippi basin; but they seem to be almost exclusively confined to those regions. The most extensive and remarkable alluvial tract is that around the mouth of the Mississippi. If we except a few small insulated fields, all the bituminous coal in the U. States lies W. of the Appalachian chain, where a vast series of coal-beds stretch from the mountains westward through Ohio, Indiana, and Illinois, and parts of Kentucky and Alabama, into the state of Missouri, and even as far as 200 m. beyond the Mississippi. Anthracite coal, or that best suited for manufactures, lies at the N. extremity of this great field, in Pennsylvania, and in the W. part of Virginia, the E. part of Ohio, and Illinois. The beds of Pennsylvania likewise contain immense and apparently inexhaustible stores of mineral oil or petroleum, which gushes forth in streams wherever it finds an outlet. Numerous salt springs exist in New York, Virginia, Pennsylvania, and the W. states. Iron is distributed most abundantly through the coal measures in Pennsylvania, Ohio, Virginia, and Tennessee, where the ore contains from 25 to 33

per cent. of metal, though it has hitherto been little wrought. It also abounds in the NW. states, and in one part of Vermont the ore is said to yield 78 per cent. iron. A large proportion of the ore found in this part of the Union is magnetic. Lead is next in importance: it is found in various places, especially in Missouri, Wisconsin and Illinois; and its average annual produce may be estimated at about 14,000 tons. In some parts of Wisconsin the lead ore is so very rich as to yield from 60 to 70 per cent. of lead. Copper has been found in large deposits in the state of Michigan, in the peninsula which stretches into Lake Superior. Immense sheets, or walls, of native copper occur in some of the mines in this district; and it is a curious fact that, though only recently re-discovered, they had evidently been opened and wrought at a remote period by the Indians. Gold has been found in small quantities in certain parts of Virginia, both Carolinas, Georgia, and Tennessee, and at a large scale in the rivers and ravines at the foot of the W. slope of the Sierra Nevada, in California. Quicksilver, copper, zinc, manganese, with lime and building-stone, constitute the other chief mineral products. Substances of volcanic origin appear to be rarely, if ever, found in the U. States, E. of the Rocky Mountains.

Population.—The progress of population in the U. States has been rapid beyond any previous example in history. The fact, however, may be easily explained, from the peculiar circumstances under which they have been placed. They have the good fortune to possess an all but boundless extent of fruitful soil, and a climate which, as it is, speaking generally, neither too hot nor too cold, is most favourable to the exercise of industry; they are, also, well situated for commerce, and enjoy an almost unequalled extent of inland navigation; and at the period of its discovery this vast country, possessing such natural advantages, was occupied only by a few thousand savages. The colonists who left Europe to settle in America had therefore, after the difficulties incident to the foundation of the first settlements had been got over, unparalleled opportunities for increasing in wealth and population. They carried with them the science and the arts of the most civilised nations of the old world, and they applied them to the culture of a virgin and unoccupied soil. Each colonist got as much land as he could cultivate or occupy without being subject to any charge for lordship or rent, at the same time that his taxes were quite inconsiderable. In fact, all that the colonists had to do was to provide for their internal government, as Britain took upon herself and defrayed the cost of their defence against foreign aggression. She, also, supplied them with manufactured products at the lowest possible rates, so that they were able to apply all their energies to agriculture, which, under the circumstances, was especially profitable. In such a state of things, the demand for labour could not be otherwise than astonishingly great: for a high rate of wages, combined with a facility of procuring land, speedily changes the labourers into landlords, who, in their turn, become the employers of fresh labourers. Under such circumstances every man might enter into matrimonial engagements without being deterred, as in old settled and densely peopled countries, by the fear of not being able to provide for the children that might be expected to spring from them. In America, indeed, and in all similarly situated countries, a large family is a source of wealth; marriages, in consequence, are at once comparatively general

stimulus thus given to the principle of population in the United States, they have been ever since their settlement a 'land of promise,' to which industrious and ambitious individuals in depressed circumstances have been emigrating from Europe; and they have, also, been 'a city of refuge,' in which the victims and the foes of political or religious intolerance have found a secure asylum.

The population of the United States has been ascertained at all times with great accuracy. The census is taken in the states in obedience to article 1, section 2 of the constitution, which provides that 'representatives and direct taxes shall be apportioned among the several states which may be included in this union according to their respective numbers;' and the same section directs that 'the actual enumeration shall be made within three years after the first meeting of the congress of the United States, and within every subsequent term of ten years.' Under these provisions, and the laws passed in pursuance of them, the census of the United States has been taken eight times, namely in 1790, in 1800, in 1810, in 1820, in 1830, in 1840, in 1850, and in 1860.

The following table gives the total population of the United States, distinguishing white and slave, in each decennial period from 1800 to 1860:—

| Years | White | Slave | Total, including Free Coloured |
|-------|------------|-----------|--------------------------------|
| 1800 | 4,304,489 | 893,041 | 5,805,925 |
| 1810 | 5,862,004 | 1,191,864 | 7,289,814 |
| 1820 | 7,861,937 | 1,588,038 | 9,688,131 |
| 1830 | 10,537,378 | 2,009,048 | 12,866,020 |
| 1840 | 14,195,695 | 2,487,455 | 17,089,458 |
| 1850 | 19,553,114 | 3,204,313 | 23,191,876 |
| 1860 | 26,975,575 | 3,958,760 | 31,445,080 |

The area, population, and number of inhabitants to the square mile in various groups of states, in the year 1860, and the increase, in per-centage, over the last decennial period, is given in the following table, in which the states are arranged in groups:—

| STATES | Area in Sq. Miles | 1860 | |
|---|-------------------|------------|------------------------------|
| | | Population | No. of Inhabitants to Sq. M. |
| Six New England States | 63,272 | 3,135,283 | 49.55 |
| Six Middle States, including Maryland, Delaware, and Ohio | 151,760 | 10,597,661 | 69.83 |
| Six Coast Planting States, including S. Carolina, Georgia, Florida, Alabama, Mississippi, and Louisiana | 286,077 | 4,364,927 | 15.25 |
| Six Central Slave States, namely, Virginia, N. Carolina, Tennessee, Kentucky, Missouri, and Arkansas | 309,210 | 6,471,887 | 20.93 |
| Seven North Western States, namely, Indiana, Illinois, Michigan, Wisconsin, Iowa, Minnesota, and Kansas | 250,295 | 5,543,382 | 22.14 |
| Texas | 237,321 | 604,215 | 2.55 |
| California | 188,982 | 379,994 | 2.01 |

It will be seen from the above table, that the

increased most rapidly in the seven North Western states, and least in the six New England states. The six middle states had, in 1860, the densest population, which, however, was considerably less so than that of Turkey in Europe. Sweden and Norway itself, which have the thinnest population of any state in Europe, have seven times as many inhabitants to the square mile as Texas and California. The population of Prussia and Austria is three times, and that of Great Britain five times as dense as that of the six New England states. As for the Southern states, comprising the six coast planting and the six central slave states, their population, at the census of 1860, was only half as dense as that of Russia in Europe.

The subjoined table gives the total population of each state and territory of the United States—distinguishing white, Indians, and slaves, in the year 1860, according to the census returns.

| STATES | White | Indian | Slaves | Tot., includ- ing 'Free Coloured' |
|--|-------------------|---------------|------------------|---|
| Alabama . . . | 526,271 | 160 | 433,080 | 964,201 |
| Arkansas . . . | 324,143 | 48 | 111,115 | 435,450 |
| California . . . | 338,003 | 14,555 | — | 379,994 |
| Connecticut . . . | 451,504 | 16 | — | 460,147 |
| Delaware . . . | 90,589 | — | 1,798 | 112,216 |
| Florida . . . | 77,747 | 1 | 61,745 | 140,425 |
| Georgia . . . | 591,550 | 38 | 462,198 | 1,057,286 |
| Illinois . . . | 1,704,291 | 32 | — | 1,711,951 |
| Indiana . . . | 1,338,710 | 290 | — | 1,350,428 |
| Iowa . . . | 673,779 | 65 | — | 674,948 |
| Kansas . . . | 106,390 | 189 | 2 | 107,206 |
| Kentucky . . . | 918,484 | 33 | 225,483 | 1,155,684 |
| Louisiana . . . | 357,456 | 173 | 331,726 | 708,002 |
| Maine . . . | 626,947 | 5 | — | 628,279 |
| Maryland . . . | 515,918 | — | 87,189 | 687,049 |
| Massachusetts . . . | 1,221,432 | 32 | — | 1,231,066 |
| Michigan . . . | 739,799 | 2,155 | — | 749,113 |
| Minnesota . . . | 171,227 | 2,369 | — | 173,855 |
| Mississippi . . . | 353,899 | 2 | 436,631 | 791,305 |
| Missouri . . . | 1,063,489 | 20 | 114,031 | 1,182,012 |
| New Hampsh. . . | 325,579 | — | — | 326,073 |
| New Jersey . . . | 646,699 | — | 18 | 672,035 |
| New York . . . | 3,831,590 | 140 | — | 3,880,735 |
| N. Carolina . . . | 629,942 | 1,158 | 331,050 | 992,622 |
| Ohio . . . | 2,302,808 | 30 | — | 2,339,502 |
| Oregon . . . | 52,160 | 177 | — | 52,465 |
| Pennsylvania . . . | 2,819,259 | 7 | — | 2,906,115 |
| Rhode Island . . . | 170,649 | 19 | — | 174,620 |
| S. Carolina . . . | 291,300 | 88 | 402,406 | 703,708 |
| Tennessee . . . | 826,722 | 60 | 275,719 | 1,109,801 |
| Texas . . . | 420,891 | 403 | 182,566 | 604,215 |
| Vermont . . . | 314,369 | 20 | — | 315,098 |
| Virginia . . . | 1,047,299 | 112 | 490,865 | 1,596,318 |
| Wisconsin . . . | 773,693 | 613 | — | 775,881 |
| Total . . . | 26,699,342 | 23,370 | 3,950,531 | 31,149,805 |
| TERRITORIES | | | | |
| Colorado . . . | 34,231 | — | — | 34,277 |
| Dakota . . . | 2,576 | 2,261 | — | 4,837 |
| District of Columbia . . . | 60,763 | 1 | 3,185 | 75,080 |
| Nebraska . . . | 28,696 | 63 | 15 | 28,841 |
| Nevada . . . | 6,812 | — | — | 6,857 |
| New Mexico . . . | 82,924 | 10,452 | — | 93,516 |
| Utah . . . | 40,125 | 89 | 29 | 40,273 |
| Washington . . . | 11,138 | 426 | — | 11,594 |
| Total . . . | 267,320 | 13,292 | 3,229 | 295,275 |
| Total in States and Territories . . . | 26,966,662 | 36,662 | 3,953,760 | 31,445,080 |

The first negro slaves were imported into Virginia in 1619, and in 1670 there were about 2,000 negro slaves in the colony. The first slave ship fitted out in the English colonies sailed from Boston in 1648. The importation of slaves into the United States was interdicted by law in 1808

the importation of slaves into that colony; and the next year, and while still a British colony, passed a law of emancipation, by declaring the children of all slave mothers to be born free. Massachusetts abolished slavery by the Bill of Rights in 1780. Connecticut, in 1784, put a stop to the introduction of negroes, and declared all born after March 1 of that year free at the age of twenty-six. Pennsylvania prohibited the introduction of slaves in 1780, and declared free all children of slave mothers born after the passing of the law. Virginia prohibited the importation of slaves in 1778, and Maryland in 1783. Slavery was abolished in New Hampshire in 1792, in New York in 1799, and in New Jersey in 1825. The great civil war of 1861–65 practically abolished slavery throughout the whole of the United States, leaving the complete emancipation of the black race a mere matter of form on the part of the so-called slave states.

The total slave population of all the American states and territories amounted to 697,897 in 1790, to 893,041 in 1800, to 1,191,364 in 1810, to 1,538,038 in 1820, to 2,009,043 in 1830, to 2,487,455 in 1840, to 3,204,313 in 1850, and to 3,953,587 in 1860. The increase of slaves in the several decades, from 1790 to 1860, was very regular, namely, in round numbers, 28, 28, 34, 29, 30, 24, 28, and 24 per cent.

The subjoined table exhibits the value of real estate and personal property according to the census of 1850, and the census of 1860; also the increase, and the increase per cent. :—

| STATES AND TERRITORIES | Real Estate and Personal Property | | Increase per cent |
|-------------------------------------|-----------------------------------|---------------|-------------------|
| | 1850 | 1860 | |
| | Dollars | Dollars | |
| Alabama . . . | 228,204,332 | 495,287,078 | 117.01 |
| Arkansas . . . | 39,841,025 | 219,256,473 | 450.32 |
| California . . . | 22,161,872 | 207,874,813 | 837.88 |
| Connecticut . . . | 155,707,080 | 444,274,114 | 185.82 |
| Delaware . . . | 21,062,556 | 46,242,181 | 119.54 |
| Florida . . . | 22,862,270 | 78,101,500 | 219.74 |
| Georgia . . . | 335,125,714 | 645,895,287 | 92.56 |
| Illinois . . . | 156,265,006 | 871,860,282 | 457.93 |
| Indiana . . . | 202,650,264 | 528,835,371 | 160.95 |
| Iowa . . . | 23,714,638 | 247,338,265 | 942.97 |
| Kansas . . . | — | 31,327,895 | — |
| Kentucky . . . | 301,628,456 | 666,043,112 | 120.81 |
| Louisiana . . . | 233,998,764 | 602,118,568 | 157.81 |
| Maine . . . | 122,777,571 | 190,211,600 | 54.92 |
| Maryland . . . | 219,217,364 | 376,919,944 | 71.93 |
| Massachusetts . . . | 573,342,286 | 815,237,433 | 42.19 |
| Michigan . . . | 59,787,255 | 257,163,983 | 380.13 |
| Minnesota . . . | No return | 52,294,413 | — |
| Mississippi . . . | 228,951,130 | 607,324,911 | 164.26 |
| Missouri . . . | 137,247,707 | 501,214,398 | 265.18 |
| New Hampshire . . . | 103,652,835 | 156,310,860 | 50.80 |
| New Jersey (partly estimated) . . . | 200,000,000 | 467,918,324 | 133.95 |
| New York . . . | 1,080,309,216 | 1,843,338,517 | 70.63 |
| North Carolina . . . | 226,800,472 | 358,739,399 | 58.17 |
| Ohio . . . | 504,726,120 | 1,193,898,422 | 136.54 |
| Oregon . . . | 5,063,474 | 28,930,637 | 471.35 |
| Pennsylvania . . . | 722,486,120 | 1,416,501,818 | 96.05 |
| Rhode Island . . . | 80,508,794 | 135,337,588 | 68.10 |
| South Carolina . . . | 288,257,694 | 548,138,754 | 90.15 |
| Tennessee . . . | 291,246,686 | 493,903,892 | 145.42 |
| Texas . . . | 52,740,473 | 365,200,614 | 592.44 |
| Vermont . . . | 92,205,049 | 122,477,170 | 32.83 |
| Virginia . . . | 430,701,082 | 793,249,681 | 84.17 |
| Wisconsin . . . | 42,056,595 | 273,671,668 | 550.72 |
| District of Columbia . . . | 14,018,874 | 41,084,945 | 193.06 |
| Nebraska Territory . . . | — | 9,131,056 | — |
| N. Mexico Territory . . . | 5,174,471 | 20,813,768 | 302.24 |
| Utah Territory . . . | 986,083 | 5,596,118 | 467.50 |
| Washington Territory . . . | — | 5,601,466 | — |

The following table shows the number of arrivals of passengers from foreign countries during periods of nearly ten years each, indicating the progress of immigration:—

| Periods | Passengers of For. Birth | American and Foreign |
|---|--------------------------|----------------------|
| In the 10 years ending September 30, 1829 | 128,502 | 151,636 |
| In the 10½ years ending December 31, 1839 | 538,381 | 572,716 |
| In the 9½ years ending September 30, 1849 | 1,427,337 | 1,479,478 |
| In the 11½ years ending December 31, 1860 | 2,968,194 | 3,255,591 |
| In the 41½ years ending December 31, 1860 | 5,062,414 | 5,459,421 |

The following is a statement in which the number of immigrants have been spread over equal decennial periods, by the aid of the quarterly reports. It shows, more clearly than the foregoing table, the tide of immigration into the United States:—

| Three Census Periods. | Passengers of Foreign Birth. |
|--|------------------------------|
| In the 10 years previous to June 1, 1840 | 552,000 |
| In the 10 years previous to June 1, 1850 | 1,558,300 |
| In the 10 years previous to June 1, 1860 | 2,707,624 |

The immigration during the years 1860-63 was above the average. The total number of foreign immigrants arrived in the United States during the year 1863 amounted to 196,540. The greater number of those immigrants came from Ireland.

The subjoined table shows the distribution of ages of the immigrants on arrival:—

| Ages | Number of Ages stated from 1820 to 1860 | | |
|-----------------|---|-----------|-----------|
| | Males | Females | Total |
| Under 5 | 218,417 | 206,676 | 419,093 |
| 5 and under 10 | 199,704 | 180,606 | 380,310 |
| 10 and under 15 | 194,580 | 166,833 | 361,413 |
| 15 and under 20 | 404,338 | 349,755 | 754,093 |
| 20 and under 25 | 669,853 | 428,974 | 1,098,827 |
| 25 and under 30 | 576,822 | 269,554 | 846,376 |
| 30 and under 35 | 352,619 | 163,778 | 516,397 |
| 35 and under 40 | 239,468 | 114,165 | 353,633 |
| 40 and upwards | 342,022 | 200,322 | 542,344 |
| Total | 3,197,823 | 2,074,653 | 5,272,486 |

The places of birth of the numbers of immigrants arriving in the United States from 1820 to 1860, are shown in the subjoined statement:—

| Place of Birth | Number |
|--------------------------------------|-----------|
| England | 302,665 |
| Ireland | 967,366 |
| Scotland | 47,890 |
| Wales | 7,935 |
| Great Britain and Ireland | 1,425,018 |
| France | 208,063 |
| Spain | 16,248 |
| Portugal | 2,614 |
| Belgium | 9,862 |
| Prussia | 60,432 |
| Germany | 1,486,044 |
| Holland | 21,579 |
| Denmark | 5,540 |
| Norway and Sweden | 36,129 |
| Poland | 1,659 |
| Russia | 1,374 |
| Turkey and Greece | 286 |
| Switzerland | 37,733 |
| Italy | 11,202 |
| Sicily, Sardinia, Corsica, and Malta | 2,718 |

| Place of Birth | Number |
|--|-----------|
| British America | 117,142 |
| South America | 6,201 |
| Central America and Mexico | 18,734 |
| West Indies | 40,487 |
| China | 41,448 |
| East Indies | 127 |
| Persia | 22 |
| Asia | 27 |
| Liberia, Egypt, Morocco, Algiers, and Barbary States | 34 |
| Cape of Good Hope | 2 |
| Africa | 279 |
| Azores, Canary, Madeira, and Cape de Verd Islands | 3,371 |
| Sandwich and Society Islands | 86 |
| Australia | 109 |
| St. Helena | 17 |
| Isle of France | 8 |
| South Sea Islands and New Zealand | 83 |
| Not stated | 180,854 |
| Total Aliens | 5,062,414 |
| United States | 897,007 |
| Total | 5,459,421 |

The following is an estimate of the number of naturalised citizens residing in the United States in the year 1865, with the countries whence they have originated:—Ireland, 1,611,000; German States, 1,198,000; England, 480,000; British America, 250,000; France, 109,000; Scotland, 105,000; Switzerland, 54,000; Wales, 45,000; Norway, 43,000; Holland, 28,000; Turkey, 28,000; Italy, 10,000; Denmark, 10,000; Belgium, 9,000; Poland, 7,000; Mexico, 7,000; the Antilles, 7,000; China, 5,000; Portugal, 4,000; Prussia, 3,000; various countries, 264,000; total, 4,186,000.

The rapid increase of population, and particularly the continual extension of the white settlers further W., will, ere long, go far to extinguish the native races. The Sioux Indians, estimated at 27,000 or 28,000, still hold their ground W. of the Mississippi; and nearly all the region from that river to the Rocky Mountains, and from the Arkansas to the head waters of the Missouri, are inhabited by nations more or less connected with them; but of the tribes formerly inhabiting the country E. of the Mississippi, few remnants exist. Of the Iroquois and Algonquins, there are now estimated to be only about 8,000 individuals in all, chiefly in New York and the New England states. Further S. a few Cherokees and Chick-saws still occupy their original seats; but a war of extermination has been latterly carried on against the Indians of Florida, provoked in a great measure by their hostility to the whites. The Indians who remain within the states are allowed to retain their own government; but inducements have been held out to them either to become citizens of the states in which they reside, or to emigrate to the Platte country, W. of Arkansas and Missouri, where lands have been provided for the purpose, and where they are supplied with agricultural implements, and other necessities of civilised life.

The mortality of the entire population of the United States amounted to 392,821 in 1860, as against 323,272 in 1850, the average in each of those years being as 1·27 to 1·41. It varied, in 1860, according to latitude, the nature of the population, the soil, and other causes, from 0·44 per cent. in Washington territory, to 2·06 per cent. in Arkansas. The next highest mortality to that in Arkansas was in the two states of Massachusetts and Louisiana, and the same, 1·76 per cent., in



capital is situated. Taking the country by regions, the Pacific coast and the north-western states show the lowest, and the Mississippi Valley the highest rate of mortality.

Land and Agriculture.—In the N. States extensive landholders are not common; and, where they exist, a great part of their possessions is unproductive. The soil is chiefly cultivated by its owners, who in many respects resemble the tenants of Scotland, and often perform a great portion of the manual labour of the farm. But in many parts of the country, which have been long settled, the farmers are opulent, and hire a good deal of labour; and in the more recently settled tracts they do not labour hard after the first three or four years from their settlement. In the S. estates are larger, and in the rice plantations of Louisiana a single field sometimes comprises 300 or 400 acres. The price of land is very variable: near Philadelphia land of fine quality and in high condition may be had at from 120 to 200 dollars an acre; but there produce of all kinds fetches a high price, and the straw of a wheat crop has been sold at 30 dollars per acre. In some parts of New York, as near Canandaigua, 25 doll. an acre is asked for fine cleared land; but, in other parts of the same state, land is sometimes sold by auction for less than one-half the price. Almost every farmer in the E. states who has a family, or is in straitened circumstances, is willing to sell his land, and move to the W. states, where he can obtain soil of an equal or better quality, and in a finer climate, usually at one-twentieth part of the price. In Michigan, though the prairie lands sometimes fetch from 3 to 6 doll. an acre, the government upset price is only 1½ doll., and the rich land in Illinois, and elsewhere in the Union, is often to be had at the same low rate. The terms of rent, at least in the N., are almost equally variable. Near towns, and in thickly peopled districts, a small rent is paid in money, and a lease of several years taken. In remote situations land is commonly let in shares from year to year. If the owner of the soil furnish seed and labouring animals, he gets two-thirds of the produce; if the tenant supply animals and seed, the landowner gets one-third. But terms vary according to situation, soil, and crop.

The quantity of land unoccupied within the U. States is of prodigious extent. The cleared land is indeed quite inconsiderable, as compared with the whole surface. In the country E. of the Alleghanies, which, however, is but of very limited extent, all the land worth occupying belongs to private individuals. But, even of this, a great part is covered with forest; and in all situations near a village, or where there is ready access to water carriage, forest land is more valuable than that which has been cleared, fuel, in many places, having latterly become very dear. Except on the banks of the rivers, the soil E. of the mountains is generally so inferior, that much of the land covered with wood is not worth cultivating, and should the trees be cut down, it is likely to remain in pasturage, or be preserved as a forest for the production of new trees. The price of farms, however, varies from 5L to 30L an acre, according to the quality of soil, buildings, and situation. This part of the states has a comparatively abundant supply of labour, and a ready market for all kinds of produce. Market gardening and dairy husbandry are here the most profitable branches of industry.

The soil W. of the Alleghanies is generally much superior to that on their E. side; and large tracts produce, for a while at least, Indian corn and wheat without manure. Almost all the land

in the E. part of this region belongs to private individuals, though a large proportion is still covered with forest trees. On the W. side of the Mississippi, the greater part by far of the country is public property; but, in either case, great quantities of land are always in the market. Labour can generally be had, except in the extreme W. Farm produce is in constant demand, and prices are regulated by the markets of New Orleans, to which it is sent by the Mississippi, these being in part governed by the prices on the E. coast, and in part by those of the Havannah and other great W. Indian ports. Manures are seldom used except near the larger towns. The price of farms of an equal quality of soil vary according to their distance from the means of transport, from a dollar to 12L the acre. The money wages of labour may be stated to be nearly the same from the E. to the extreme W., any difference being towards a rise in the W. But land is there so cheap, that every prudent labourer is able to purchase a farm for himself in a year or two, and it is only the imprudent who continue labourers.

Speaking generally, agriculture is little known as a science in any part of America, and but imperfectly understood as an art; and it could not rationally be expected that it should be otherwise. In all those countries in which, as in the greater part of America, portions of fertile and unoccupied land may be obtained for little more than a nominal price, the invariable practice is, after clearing and breaking up a piece of land, to subject it to a course of continuous cropping; and, when it is exhausted, to resort to some other tract of new ground, leaving that which has been abandoned to recover itself by the aid of the *vis medicatrix nature*. But in those parts of the Eastern or Atlantic States that have been long settled, and are fully occupied, this scourging system can no longer be advantageously followed; and there, consequently, a better system of agriculture is beginning to be introduced; and a rotation of crops, and the manuring of land, are practised sometimes with more and sometimes with less success. Still, however, even in the best farmed districts, agriculture is in a very backward state; and, except where the land is naturally of a very superior quality, the produce is scanty, compared with what is obtained in the West European states, and in Great Britain in particular. The following table shows the average produce per acre of the corn crops in the state of New York, in contrast with what is believed to be the produce of similar crops in England:—

| Produce | | New York | England |
|-------------|------------------|----------|----------|
| Wheat | bushels per acre | 74 | 80 or 82 |
| Barley | — | 16 | 32 |
| Oats | — | 26 | 40 |
| Indian Corn | — | 25 | none |

It results from this statement that the returns per acre are about twice as great in England as in New York, which has some of the best corn growing land in the Union. In Ohio, which is supposed to be the most productive of all the states, the results are similar, the produce of wheat and barley in it being respectively 15½ and 24 bushels an acre. It is true, no doubt, that these returns may be increased; but this can only be done, if it be done at all, by the employment of greater capital and skill in the culture of the land. In the meantime the New York farmers, and those of the other Atlantic States, have to withstand the competition of their neighbours in the newly-formed states on the Mississippi and Missouri,

The subjoined table shows the extent of lands improved and unimproved, in each of the states and territories of the United States in the year 1860:—

| STATES AND TERRITORIES | Lands Improved, 1860 | Lands Unimproved, 1860 |
|---|----------------------|------------------------|
| | <i>Acres</i> | <i>Acres</i> |
| Alabama | 6,462,987 | 12,687,913 |
| Arkansas | 1,933,036 | 7,609,938 |
| California | 2,430,882 | 6,533,858 |
| Connecticut | 1,830,808 | 673,457 |
| Delaware | 637,065 | 367,230 |
| Florida | 676,464 | 2,273,008 |
| Georgia | 8,062,758 | 18,587,732 |
| Illinois | 13,251,473 | 7,993,557 |
| Indiana | 8,161,717 | 8,154,059 |
| Iowa | 3,730,253 | 5,649,136 |
| Kansas | 372,835 | 1,284,626 |
| Kentucky | 7,644,217 | 11,519,059 |
| Louisiana | 2,731,901 | 6,765,879 |
| Maine | 2,677,216 | 3,023,539 |
| Maryland | 8,002,269 | 1,833,306 |
| Massachusetts | 2,155,512 | 1,183,212 |
| Michigan | 3,419,861 | 3,511,581 |
| Minnesota | 554,397 | 2,222,734 |
| Mississippi | 5,150,008 | 11,703,556 |
| Missouri | 6,246,871 | 13,737,938 |
| New Hampshire | 2,367,039 | 1,377,591 |
| New Jersey | 1,914,445 | 1,039,086 |
| New York | 14,376,397 | 6,616,553 |
| North Carolina | 6,517,284 | 17,245,685 |
| Ohio | 12,665,587 | 8,075,551 |
| Oregon | 895,375 | 5,316,817 |
| Pennsylvania | 10,463,306 | 6,548,847 |
| Rhode Island | 329,884 | 189,814 |
| South Carolina | 4,572,060 | 11,623,860 |
| Tennessee | 6,897,974 | 13,457,960 |
| Texas | 2,619,207 | 20,486,990 |
| Vermont | 2,758,448 | 1,402,396 |
| Virginia | 11,435,954 | 19,578,946 |
| Wisconsin | 3,746,036 | 4,153,134 |
| Total of States | 162,804,521 | 244,428,549 |
| TERRITORIES. | | |
| Columbia, District of | 17,474 | 16,789 |
| Dakota | 2,115 | 24,333 |
| Nebraska | 122,582 | 501,723 |
| New Mexico | 119,315 | 1,177,655 |
| Utah | 82,260 | 58,898 |
| Washington | 83,022 | 300,897 |
| Total of Territories | 456,868 | 2,079,695 |
| Total of United States | 163,261,389 | 246,508,244 |

Maize is the great staple of American husbandry, and it grows on soil not particularly rich, as respects other products, for a succession of years, without manure, in all the vigour and luxuriance of an indigenous plant. It has been justly called the 'meal, meadow, and manure' of the farm, as it is used for both human food and the supply of the farm stock in winter, and furnishes more nourishment for man or beast on a given space, and with less labour, than any other bread-corn. But it is not successfully cultivated beyond lat. 43° N., where it begins to be superseded by the grains of Europe. Tennessee is the principal maize-growing state, and next to it are Ohio, Kentucky, Indiana, and Illinois.

The surface of the New England states is often hilly, and the soil rocky, or of the most inferior kind of sand. The principal crops are oats for horses, and rye for distillation, the corn produce of these states being insufficient for the support of their inhabs. Boston, the largest corn and flour importing port in the Union, receives nearly all her supplies of these articles from the S. states.

staple product of Kentucky, Tennessee, Maryland, Virginia, and Missouri. The tobacco of the U. States is of very superior quality; but it is a crop which scourges the land, and the labour attending its cultivation is very severe.

Cotton and rice are the great staples of the S. part of the Union; the former has even supplanted the culture of tobacco in some of the cos. of Virginia. A little cotton had been raised for domestic use in the Southern states, previously to the revolutionary war; but its produce was quite inconsiderable. In 1790, the total produce amounted to 1,500,000 pounds, and in the following year to 2,000,000 pounds. Thenceforth it went on increasing at an enormous rate, as exhibited in the following table, which shows the produce of cotton during the seventy-two years from 1790 to 1861:—

| Years | Pounds | Years | Pounds |
|-------|-------------|-------|---------------|
| 1790 | 1,500,000 | 1826 | 250,000,000 |
| 1791 | 2,000,000 | 1827 | 270,000,000 |
| 1792 | 3,000,000 | 1828 | 325,000,000 |
| 1793 | 5,000,000 | 1829 | 365,000,000 |
| 1794 | 8,000,000 | 1830 | 350,000,000 |
| 1795 | 8,000,000 | 1831 | 385,000,000 |
| 1796 | 10,000,000 | 1832 | 390,000,000 |
| 1797 | 11,000,000 | 1833 | 445,000,000 |
| 1798 | 15,000,000 | 1834 | 460,000,000 |
| 1799 | 20,000,000 | 1835 | 500,000,000 |
| 1800 | 35,000,000 | 1836 | 550,000,000 |
| 1801 | 48,000,000 | 1837 | 570,000,000 |
| 1802 | 55,000,000 | 1838 | 720,000,000 |
| 1803 | 60,000,000 | 1839 | 545,000,000 |
| 1804 | 65,000,000 | 1840 | 870,000,000 |
| 1805 | 70,000,000 | 1841 | 654,000,000 |
| 1806 | 80,000,000 | 1842 | 678,000,000 |
| 1807 | 80,000,000 | 1843 | 942,000,000 |
| 1808 | 75,000,000 | 1844 | 812,000,000 |
| 1809 | 82,000,000 | 1845 | 958,000,000 |
| 1810 | 85,000,000 | 1846 | 840,000,000 |
| 1811 | 80,000,000 | 1847 | 711,000,000 |
| 1812 | 75,000,000 | 1848 | 940,000,000 |
| 1813 | 75,000,000 | 1849 | 1,100,000,000 |
| 1814 | 70,000,000 | 1850 | 860,000,000 |
| 1815 | 100,000,000 | 1851 | 990,000,000 |
| 1816 | 124,000,000 | 1852 | 1,800,000,000 |
| 1817 | 130,000,000 | 1853 | 1,400,000,000 |
| 1818 | 125,000,000 | 1854 | 1,300,000,000 |
| 1819 | 167,000,000 | 1855 | 1,200,000,000 |
| 1820 | 160,000,000 | 1856 | 1,550,000,000 |
| 1821 | 180,000,000 | 1857 | 1,300,000,000 |
| 1822 | 210,000,000 | 1858 | 1,400,000,000 |
| 1823 | 185,000,000 | 1859 | 1,750,000,000 |
| 1824 | 215,000,000 | 1860 | 2,200,000,000 |
| 1825 | 225,000,000 | 1861 | 1,650,000,000 |

American cotton, the produce of the *Gossypium herbaceum*, is of two kinds, generally known by the names of *sea island* and *upland*. The former grows along the low sandy islands off the shores of Carolina and Georgia. It is long in the staple, has an even silky texture, a yellowish tinge, is easily separated from the seed, and is decidedly superior to every other description of cotton hitherto brought to market. Unluckily, however, it can be raised only in certain situations; so that its quantity is limited, and has not, in fact, been at all increased since 1805. At present 97 or 98 per cent. of the cotton produced in the United States consists of what is denominated upland, from its being grown on the comparatively high ground at a distance from the coast. Though of varying qualities, it is all short-stapled; and its separation from the seed and pod, if attempted by the hand, is so very difficult, that the cotton is hardly worth the trouble and expense. This, however, was the only way in which it could be made available for home use, or exportation, in 1791;

exported, he would have been looked upon as a visionary. But the genius of Mr. Eli Whitney did for the cotton planters of the United States what Arkwright did for the manufacturers of England. He invented a machine by which the cotton wool is separated from the pod, and cleaned with the greatest ease and expedition; and in this way may be said to have more than doubled the wealth and industry of his countrymen. The effect of the machine has been, like that of Arkwright, all but miraculous. American cotton is generally exported in bales, firmly packed, and containing each from 390 to 455 lbs. The quantity of cotton produced per acre varies, on good lands, from 250 to 300 lbs., and on inferior lands from 125 to 150 lbs.

The subjoined table shows the quantities of the three great staples of cotton, rice, and tobacco, exported from 1821 to 1861, according to a report of the secretary of the treasury of the United States:—

| Years | Cotton | Rice | Tobacco |
|-------|----------------|-----------|-----------|
| | Pounds | Tierces | Hogsheads |
| 1821 | 124,893,405 | 88,221 | 66,858 |
| 1822 | 144,675,095 | 87,089 | 83,169 |
| 1823 | 173,723,270 | 101,365 | 99,009 |
| 1824 | 142,369,663 | 113,229 | 77,883 |
| 1825 | 176,449,907 | 97,015 | 75,984 |
| 1826 | 204,535,415 | 111,063 | 64,098 |
| 1827 | 294,310,115 | 113,518 | 100,025 |
| 1828 | 210,590,463 | 175,019 | 96,278 |
| 1829 | 264,837,186 | 132,923 | 77,131 |
| 1830 | 298,459,102 | 130,697 | 83,810 |
| 1831 | 276,979,784 | 116,517 | 86,718 |
| 1832 | 322,215,122 | 120,327 | 106,806 |
| 1833 | 324,698,604 | 144,163 | 83,153 |
| 1834 | 384,717,907 | 121,886 | 87,979 |
| 1835 | 387,358,902 | 119,851 | 94,353 |
| 1836 | 423,631,307 | 212,983 | 109,042 |
| 1837 | 444,211,537 | 106,084 | 100,232 |
| 1838 | 595,952,297 | 71,048 | 100,593 |
| 1839 | 413,624,212 | 93,320 | 78,995 |
| 1840 | 743,941,061 | 101,660 | 119,484 |
| 1841 | 530,204,100 | 101,617 | 147,828 |
| 1842 | 584,717,017 | 114,617 | 158,710 |
| 1843 | 792,297,106 | 106,766 | 94,454 |
| 1844 | 663,635,455 | 134,715 | 163,042 |
| 1845 | 872,905,996 | 118,621 | 147,163 |
| 1846 | 547,558,055 | 124,907 | 147,998 |
| 1847 | 627,219,958 | 144,427 | 135,762 |
| 1848 | 814,274,431 | 100,403 | 130,665 |
| 1849 | 1,026,602,269 | 128,861 | 101,521 |
| 1850 | 635,381,604 | 127,069 | 145,729 |
| 1851 | 927,237,089 | 105,590 | 95,945 |
| 1852 | 1,093,230,639 | 119,733 | 137,097 |
| 1853 | 1,111,570,370 | 67,707 | 159,853 |
| 1854 | 987,833,106 | 105,121 | 126,107 |
| 1855 | 1,008,424,601 | 52,520 | 150,213 |
| 1856 | 1,351,431,701 | 58,668 | 116,962 |
| 1857 | 1,048,282,475 | 64,332 | 156,848 |
| 1858 | 1,118,624,012 | 64,015 | 127,671 |
| 1859 | 1,386,468,562 | 81,320 | 198,846 |
| 1860 | 1,767,686,338 | 84,163 | 167,274 |
| 1861 | 307,516,099 | 39,162 | 160,816 |
| | 25,455,273,427 | 4,412,912 | 4,762,108 |

Rice is produced chiefly in S. Carolina. It was introduced into the states in 1694 from Madagascar. The usual time of planting rice is from the 20th of March to the 20th of May, and the harvest begins about 1st Sept. No grain yields more abundantly. From 40 to 70 bushels an acre is an ordinary crop, but 80 and 90 bushels are often produced on strong lands, having the advantage of being overflowed by a river or reservoirs. The water is not let in upon the field till after the second hoeing, and is kept on frequently for 30 days.

The sugar-cane grows in low and warm situations as high as lat. 33°, but the climate does not

suit well N. of 31° 30'. In Louisiana, however, it is cultivated with success, though the crop is very variable. Several varieties of the cane, as the African, Otaheite, W. Indian, and Ribband, are grown. The last is the most prolific of juice, and an acre of ground, properly managed, will yield a hhd. of sugar. In the N. part of the Union, as in Canada, maple sugar, a saccharine matter derived from maple trees, either growing wild or cultivated for the purpose, is extensively collected. The trees are tapped two or three inches into the wood to obtain the sap, from which the sugar is extracted, some time in February or the beginning of March. The holes are made in a slanting direction, in which sprouts of alder or sumach are placed; but they are plugged up as soon as the sap is drawn. The tree does not become impoverished by repeated tapplings. There are instances on the Hudson, where the process has been continued for 50 years.

Indigo was formerly raised in Georgia and Carolina, but its culture has been superseded by that of cotton. Some good wine has been produced in the same states, and the vine and mulberry tree are common in many parts of the Union, without, however, having yet become objects of much attention. Fruits of most temperate and tropical climates, and European vegetables, thrive well. The apples grown in the vicinity of New York are decidedly the best variety of the fruit that is anywhere to be met with. Hemp, flax, and hops are frequent crops in the N. and W. states.

Most European travellers speak disparagingly of the cattle and sheep of the Eastern states. Near New York the cattle grazing on the scanty herbage appear mere starvelings, and smaller than some of the Highland cattle of Scotland. The sheep are even more miserable-looking than the cattle; pigs correspond; and the horse alone forms an exception to the general wretchedness, some fine animals of this species being met with. The same appears to be the case in the New England states, sometimes even on superior farms, and with cattle originally of a good breed. This inferiority of the cattle in the Eastern states has been explained as follows by Mr. Jefferson (Notes on Virginia, p. 90):—'In a thinly-peopled country, the spontaneous productions of the forests and waste fields are sufficient to support indifferently the domestic animals of the farmer, with very little aid from him in the severest and scarcest season. He, therefore, finds it more convenient to receive them from the hands of nature in that indifferent state than to keep up their size, by a care and nourishment that would cost him much labour.' This, no doubt, is the cause of the lean and wretched condition of the cattle in most parts of the Atlantic states; but, wherever the pastures are of especial excellence, the cattle are comparatively good; and fine grass lands are not unfrequent even in the old settled states. An English traveller, Mr. Shirreff, says of the Genessee flats in the state of New York, 'Perhaps no gentleman's park in Britain equals them in fertility and beauty. They differ from the rest of the surface in this part of the country, in having been cleared by nature; and are chiefly in grass, affording the richest pasturage I ever saw, with the exception of some fields in the neighbourhood of Boston in Lincolnshire.' But the great cattle-breeding states are in the W.; and herds of some thousands are brought up from Kentucky, for sale at New York. They bear some resemblance to the Hereford cattle, and when 4 or 5 years old are estimated to weigh at an average 80 stone. The dairy is now attracting considerable attention in some states, and the ex-

ports of cheese have astonishingly increased. On improved farms the sheep are mostly crosses of the Saxon and Merino; for, though the Leicester and Cotswold breeds are reared, the former, particularly if pure, is not found to answer. The stock of sheep, in 1860, amounted to 23,317,756. Illinois appears to be the state best adapted for sheep, as it is for most other kinds of husbandry; and so much of its surface remains to be disposed of, that, estimating the fleece of a Merino sheep at 3 lbs., and its price at 60 cents the lb., the wool of one sheep in a year will nearly purchase $1\frac{1}{2}$ acre of land. Wool can be transported from Illinois to the E. states for 3 or 4 cents per lb.

The stock of hogs in the U. States amounted to 82,555,267 in 1860, and their breeding and fattening is a most important branch of rural economy. Except, indeed, in seasons when there is a large export of Indian corn to supply the place of the potato, almost the entire produce of that grain is employed in distillation and in the feeding of hogs. The latter are usually allowed to run wild in the woods till 5, 6, or 7 weeks before they are to be killed, when they are turned into the fields of Indian corn to fatten and harden their flesh. Ohio is the principal hog-feeding state, the killing and packing departments of the business having been gradually concentrated in and about Cincinnati.

The following table shows the number of live stock, and quantities of miscellaneous articles produced in the United States, in each of the years 1850 and 1860:—

| Live Stock and Miscellaneous Articles | | 1850 | 1860 |
|---------------------------------------|---------|-------------|---------------|
| Horses | No. | 4,836,719 | 6,115,458 |
| Asses and Mules | " | 550,831 | 1,129,513 |
| Milch Cows | " | 6,385,004 | 8,728,862 |
| Working Oxen | " | 1,700,694 | 2,240,075 |
| Other Cattle | " | 10,293,069 | 14,671,400 |
| Sheep | " | 21,723,220 | 23,317,756 |
| Swine | " | 30,354,213 | 82,555,267 |
| Total Value of Live Stock | Dollars | 544,180,516 | 1,107,490,216 |
| Value of Animals slaughtered | " | 111,703,142 | 212,871,653 |
| Rye | Bushels | 14,188,813 | 20,976,286 |
| Ginned Cotton | Bales | 2,445,793 | 5,198,077 |
| Peas and Beans | Bushels | 9,219,901 | 15,188,013 |
| Sweet Potatoes | " | 38,268,148 | 41,606,302 |
| Barley | " | 5,167,015 | 15,635,119 |
| Buckwheat | " | 8,956,912 | 17,664,914 |
| Orchard Products | Dollars | 7,723,186 | 19,759,361 |
| Wine | Gallons | 221,249 | 1,860,008 |
| Production of Market Gardens | Dollars | 5,280,030 | 15,541,027 |
| Hay | Tons | 13,838,642 | 19,129,128 |
| Clover Seed | Bushels | 468,978 | 929,010 |
| Grass Seed | " | 416,831 | 900,386 |
| Hemp:— | | | |
| Dew rotted | Tons | 33,193 | 83,247 |
| Water rotted | " | 1,678 | 3,943 |
| Other prepared | " | — | 17,300 |
| Hops | Lbs. | 3,497,029 | 11,010,912 |
| Flax | " | 7,709,676 | 3,783,079 |
| Flaxseed | Bushels | 562,312 | 611,927 |
| Silk Cocoons | Lbs. | 10,843 | 6,562 |
| Sugar:—Maple | Hhds. | 34,253,436 | 38,863,884 |
| Cane | " | 237,133 | 302,205 |
| Molasses:— | | | |
| Cane | Gallons | 12,700,991 | 16,337,080 |
| Sorghum | " | — | 7,235,025 |
| Maple | " | — | 1,944,594 |
| Beeswax | Lbs. | 14,853,691 | 1,357,864 |
| Honey | " | — | 25,028,991 |

The condition and mode of life of the agricultural pop. is very different in different parts of

settled portions of the country, bear the greatest resemblance to Great Britain. The villages of New England are uniformly clean, airy, and neat, with spacious openings near the centre, in which churches form the most prominent feature. The houses are, in some instances, built of brick, but more frequently of wood, painted white, and with green Venetian blinds opening to the outside. Both churches and dwelling-houses seem to be painted annually; at least they are never seen in the slightest degree dingy coloured. The houses of every size and fabric have a light appearance from the number of windows they contain. They seldom indicate either extensive wealth or poverty in the inmates, and the villages want only the judicious aid of flowers and shrubs to render them beautiful. Landscape gardening, and similar ornamented work, is, however, very backward in America.

In the newly settled states of the W., the farmer must dispense with much of the civilisation of the E., and live in his log-house with a few necessary articles of furniture, in the rudest and most primitive manner. But if his style of life be less comfortable, he reaps the benefit of his privations in a more rapid accumulation of wealth. The settler of Illinois places his house on the forest or on the open field as fancy may dictate. The prairie furnishes summer and winter food for any number of cattle and sheep, and poultry and pigs shift for themselves until the crops ripen. With the preliminary of fencing, the plough enters the virgin soil, which, in a very few months afterwards, yields a most abundant crop of Indian corn, and, on its removal, every agricultural operation may be executed with facility. Pastoral, arable, or mixed husbandry may be at once adopted, and produce of all kinds obtained in profusion.

The agricultural labourers of the U. States are well fed, and generally efficient. The hours of labour are usually from sunrise to sunset. Near New York farm labourers get from 10 to 12 dollars a month, with bed and board, including washing; spademen get 75 cents a day, without board, all the year round. Near Philadelphia, wages are about the same. In Michigan, where labour is scarce, a good farm *help* obtains 120, and an indifferent one 100 dollars a year, with bed and board; and a female *help* receives, in private families, one dollar a week. An ordinary farm labourer in Illinois gets the value of 80 acres of land a year: in Britain, due allowance being made for the board of the labourer, he does not get 1-10th of the value of an acre of good land; so that, when wages are compared with land, the farm labourer of Illinois is about 800 times better rewarded than in Britain.

Manufactures.—*Manufacturing industry* in the United States, though very considerable, is carried on under several disadvantages incident to the situation of the country. Under the peculiar circumstances in which America is placed, agriculture is necessarily the most advantageous employment in which her population can engage; and it is a short-sighted policy to endeavour, by dint of custom-house regulations, to force up a manufacturing interest. The boundless extent of her fertile and unoccupied land gives her extraordinary advantages as compared with almost every other people in respect of agriculture; but she has no such advantage as regards manufactures; and yet it is plain that, unless the workpeople engaged in manufactures in different parts of the Union realised the same rate of wages, and the capitalists the same rate of profits that is realised

culture, they would either never engage in the former, or speedily abandon it for the latter. Hence the futility of all attempts to establish the finer branches of manufacture in America, without burdening similar articles when imported from abroad with heavy duties. The coarser description of articles, or those which are bulky and heavy, and in which the value of the raw material exceeds the value of the workmanship, must of course, in America as elsewhere, be always produced at home. But the finer description of goods, or those of which the value or price is principally made up of wages and profits, would, but for the interference of congress, be wholly imported from countries in which wages and profits are comparatively low. And it is needless to say that every attempt to limit or hinder such importation is inconsistent with and subversive of every sound principle of political economy. If the cotton and woollen manufactures now carried on in the United States cannot exist without a high duty being laid on foreign cottons and woollens, it is plain that the existence of such manufactures obliges every individual in the United States to pay the additional price of the duty for every yard of foreign produce that he has occasion to use. And even this is not all; for the prohibition withdraws a large portion of the public capital and industry from employments in which America has an advantage, to make them be vested in employments in which the advantage is on the side of others.

No doubt America will gradually become more and more suitable for manufacturing industry. Her command of water-power and coal, and her facilities for internal transport and navigation, are circumstances eminently favourable to manufactures. Still, however, it is certain that her natural progress to manufacturing eminence cannot be advantageously hastened by the policy on which she has embarked. When population has become dense in America, and her unoccupied land has been generally appropriated, she will necessarily undertake, and will no doubt successfully carry on, such branches of manufacturing industry as are suitable to her peculiar capabilities; but this natural development of her maturer growth cannot be profitably forwarded by interfering with the free exercise of industry.

The subjoined table furnishes a comprehensive survey of the productive industry of the United States, showing the total value of the productions of the leading manufactures in the year ended June 1st, 1860:—

| LEADING MANUFACTURES | Value of Produce in Round Numbers |
|---|-----------------------------------|
| | Dollars |
| Flour and Meal | 224,000,000 |
| Cotton Goods | 115,000,000 |
| Lumber | 96,000,000 |
| Boots and Shoes | 90,000,000 |
| Leather, including Morocco and Patent Leather | 72,000,000 |
| Clothing | 70,000,000 |
| Woollen Goods | 69,000,000 |
| Machinery, Steam Engines, &c. | 47,000,000 |
| Printing: Book, Job, and Newspaper | 42,000,000 |
| Sugar Refining | 38,500,000 |
| Iron Founding | 28,500,000 |
| Spirituuous Liquors | 25,000,000 |
| Cabinet Furniture | 24,000,000 |
| Bar and other rolled Iron | 22,000,000 |
| Pig Iron | 19,500,000 |
| Malt Liquors | 18,000,000 |
| Agricultural Implements | 17,800,000 |
| Paper | 17,500,000 |
| Soap and Candles | 17,000,000 |

The American cotton manufacture, though consisting principally of coarse fabrics, is, in extent and value, next to that of the U. Kingdom. It is principally located in the New England States, especially in Massachusetts, which has nearly half the manufacture, Rhode Island, Connecticut, and New Hampshire. The American fabrics consist principally of shirtings, sheetings, printed calicoes, yarns, and sail-cloth, in which the raw material forms a large portion of the value of the finished articles. Lowell is the principal seat of the manufacture in Massachusetts.

The manufacture of woollens has been extensively carried on from an early period in the history of the states; but it is principally conducted in private families, and it is only in recent times that woollen factories have been established on any large scale. Broad cloths, cassimeres, satinets, flannels, jeans, linseys, blankets, yarn, and carpets are the goods principally made.

The manufactures of leather, and articles made of leather, of linen and linen yarn, iron and hardware, glass, soap, and candles, are all carried on extensively. Steam-engines, and all kinds of machinery, nails, fire-grates, and stoves, chain cables, agricultural and mechanical implements, and fire-arms, are extensively manufactured; but all the finer descriptions of hardware and cutlery, and a great variety of hardware articles, are imported from England. Vast quantities of whisky are distilled in N. Carolina, Pennsylvania, New York, Massachusetts, and other states. Cincinnati, in Ohio, is, however, the grand centre of the whisky manufacture. It is wholly made from Indian corn.

The returns of the domestic manufactures of the United States, including fisheries and the produce of the mines, show that whereas, according to the census of 1850, their total value was 1,019,106,616 dollars, it amounted for the year ending on June 1, 1860, to 1,900,000,000 dollars, or an increase of more than 86 per cent. in ten years. It is assumed that one-third of the whole population of the United States is supported, directly or indirectly, by manufacturing industry.

Commerce.—The commerce of the United States is most extensive, though scarcely commensurate with the immense area of the country, and the wealth and activity of its inhabitants. Subjoined is a statement exhibiting a summary view of the exports of domestic produce, specie and bullion, of the United States, from June 30, 1847, to June 30, 1861:—

| Year ending | Manufactures | Raw Produce | Specie and Bullion |
|---------------|--------------|-------------|--------------------|
| | Dollars | Dollars | Dollars |
| June 30, 1847 | 10,476,345 | 1,526,076 | 62,620 |
| " 1848 | 12,858,758 | 974,042 | 2,700,412 |
| " 1849 | 11,280,075 | 904,980 | 956,874 |
| " 1850 | 15,196,451 | 953,664 | 2,046,679 |
| " 1851 | 20,136,967 | 1,437,680 | 18,069,580 |
| " 1852 | 18,862,937 | 1,545,767 | 37,437,837 |
| " 1853 | 22,599,930 | 1,735,264 | 23,548,535 |
| " 1854 | 26,849,411 | 2,764,781 | 28,234,566 |
| " 1855 | 28,833,299 | 2,373,317 | 53,957,418 |
| " 1856 | 30,970,992 | 3,125,429 | 44,148,279 |
| " 1857 | 29,653,267 | 3,290,485 | 60,078,352 |
| " 1858 | 30,372,180 | 2,320,479 | 42,407,246 |
| " 1859 | 33,853,660 | 2,676,322 | 57,502,305 |
| " 1860 | 39,803,080 | 2,279,308 | 56,946,851 |
| " 1861 | 36,418,254 | 3,543,695 | 23,799,870 |
| Total . | 368,165,600 | 31,651,289 | 461,897,424 |

The subjoined table gives a summary statement of the value of the exports, the growth, pro-

duce, and manufacture of the United States during the two years ending June 30, 1861:—

| PRODUCTS | Year ending June 30, 1860 | Year ending June 30, 1861 |
|---|------------------------------|---------------------------------|
| | Dollars | Dollars |
| THE SEA. | | |
| Fisheries—Oil, Spermaceti | 1,789,089 | 2,110,823 |
| Oil, Whale and other Fish | 537,547 | 581,264 |
| Whalebone | 896,293 | 736,552 |
| Spermaceti and Sperm Candles | 51,829 | 143,907 |
| Fish, Dried or Smoked | 690,088 | 634,911 |
| Fish, Pickled | 191,634 | 244,028 |
| PRODUCTS OF THE FOREST. | | |
| Wood—Staves and Heading | 2,365,516 | 1,959,392 |
| Shingles | 169,546 | 108,610 |
| Board, Plank and Scantling | 2,777,919 | 2,092,949 |
| Hewn Timber | 231,668 | 97,875 |
| Other Lumber | 705,119 | 441,979 |
| Oak Bark and other Dye | 164,260 | 189,476 |
| All Manufactures of Wood | 2,703,095 | 2,344,079 |
| Naval Stores—Tar and Pitch | 151,404 | 143,280 |
| Rosin and Turpentine | 1,818,238 | 1,060,257 |
| Ashes, Pot and Pearl | 822,820 | 651,547 |
| Ginseng | 295,766 | 292,899 |
| Skins and Furs | 1,533,208 | 878,466 |
| PRODUCTS OF AGRICULTURE. | | |
| Of Animals—Beef | 2,674,324 | 1,675,773 |
| Tallow | 1,598,176 | 2,942,370 |
| Hides | 1,036,260 | 673,818 |
| Horned Cattle | 1,032,426 | 223,246 |
| Butter | 1,144,321 | 2,355,985 |
| Cheese | 1,565,630 | 3,321,631 |
| Pork, Pickled | 3,132,313 | 2,609,818 |
| Hams and Bacon | 2,273,768 | 4,848,339 |
| Lard | 4,545,831 | 4,729,297 |
| Wool | 389,512 | 237,846 |
| Hogs | 377,604 | 3,267 |
| Horses | 233,368 | 193,420 |
| Mules | 158,080 | 191,873 |
| Sheep | 33,613 | 28,417 |
| Vegetable Food—Wheat | 4,076,704 | 38,313,621 |
| Flour | 15,448,507 | 24,645,849 |
| Indian Corn | 2,809,808 | 6,890,865 |
| Indian Meal | 912,075 | 682,003 |
| Rye Meal | 48,172 | 55,761 |
| Rye, Oats, and other small Grain and Pulse | 1,058,304 | 1,124,556 |
| Biscuit or Ship Bread | 478,750 | 429,708 |
| Potatoes | 284,673 | 285,508 |
| Apples | 99,803 | 269,363 |
| Onions | 60,786 | 102,578 |
| Rice | 2,567,399 | 1,382,178 |
| Other Products—Cotton | 191,806,555 | 34,051,483 |
| Tobacco | 15,906,547 | 13,784,710 |
| Hemp | 9,531 | 8,608 |
| Clover Seed | 506,919 | 1,063,141 |
| Flax Seed | 3,810 | 49,609 |
| Brown Sugar | 103,244 | 301,329 |
| Hops | 32,866 | 2,006,053 |
| MANUFACTURES. | | |
| Leather | 674,309 | 555,202 |
| Leather, Boots and Shoes | 782,525 | 779,876 |
| Cables and Cordage | 216,572 | 255,274 |
| Salt | 129,717 | 144,046 |
| Lead | 50,446 | 6,241 |
| Iron—Pig | 19,143 | 25,826 |
| Bar | 38,257 | 15,411 |
| Nails | 188,754 | 270,084 |
| Castings | 282,848 | 76,750 |
| Other Manufactures of | 5,174,040 | 5,536,576 |
| Copper and Brass, and Manu- factures of | 1,664,122 | 2,376,029 |
| Drugs and Medicines | 1,115,455 | 1,149,433 |
| Cotton Goods—Printed or Coloured | 3,356,449 | 2,215,032 |
| White, other than Duck | 1,403,506 | 1,076,959 |
| Duck | 382,089 | 300,668 |
| All other Manufactures of | 5,792,752 | 4,364,379 |
| Gold and Silver Coin | 26,033,678 | 10,488,590 |
| Gold and Silver Bullion | 30,913,173 | 13,311,280 |

The following is a statement exhibiting the exports to and the imports from Canada, and other British possessions in North America, to the United States, from July 1, 1851, to June 30, 1861:—

| Year ending | Exports | Imports |
|---------------|-------------|-------------|
| | Dollars | Dollars |
| June 30, 1852 | 10,509,016 | 6,110,299 |
| " 1853 | 13,140,642 | 7,550,718 |
| " 1854 | 24,566,860 | 8,927,560 |
| " 1855 | 27,806,020 | 15,136,734 |
| " 1856 | 29,029,340 | 21,310,421 |
| " 1857 | 24,262,482 | 22,124,296 |
| " 1858 | 23,651,727 | 15,806,519 |
| " 1859 | 28,154,174 | 19,727,551 |
| " 1860 | 14,183,114 | 18,861,673 |
| " 1861 | 13,522,399 | 14,791,684 |
| Total | 208,825,783 | 150,347,355 |

The following table shows the total value of imports ending 30th June, 1862:—

| From | Dollars |
|-----------------------------------|-------------------------------------|
| Russia and its Possessions | 641,242 |
| Prussia | 150 |
| Sweden and Norway | 259,419 |
| Swedish West Indies | 13,602 |
| Denmark | 527 |
| Danish West Indies | 231,744 |
| Hamburg | 9,008,841 |
| Bremen | 5,926,711 |
| Holland | 1,662,454 |
| Dutch East Indies | 325,654 |
| " West Indies | 476,130 |
| " Guiana | 241,349 |
| Belgium | 1,425,404 |
| United Kingdom:—England | 85,172,758 |
| Scotland | 1,233,221 |
| Ireland | 75,456 |
| British Possessions:—Gibraltar | 109,004 |
| Malta | 16,782 |
| East Indies | 3,066,952 |
| Australia | 122,588 |
| Cape of Good Hope, &c. | 811,586 |
| West Indies | 1,789,651 |
| Guiana | 222,664 |
| Honduras | 174,780 |
| Canada | 15,253,152 |
| Other North American Colonies | 4,046,843 |
| France on the Atlantic | 5,740,286 |
| " Mediterranean | 2,095,180 |
| French North American Possessions | 39,684 |
| " West Indies | 12,312 |
| " Guiana | 132,562 |
| Spain on the Atlantic | 277,643 |
| " Mediterranean | 909,556 |
| Canary Islands | 15,249 |
| Philippine Islands | 1,065,772 |
| Cuba | 20,931,983 |
| Porto Rico | 8,195,320 |
| Portugal | 88,492 |
| Madeira | — |
| Cape de Verd Islands | 20,935 |
| Azores | 51,462 |
| Italy:—Sardinia | 355,147 |
| Tuscany | 400,954 |
| Two Sicilies | 1,535,967 |
| Trieste and other Austrian Ports | 39,198 |
| Ionian Islands | — |
| Greece | — |
| Turkey and Egypt | 690,443 |
| Hayti | 1,575,267 |
| San Domingo | 335,655 |
| Mexico | 2,684,852 |
| Central America | 144,161 |
| New Granada | 2,402,986 |
| Venezuela | 2,022,186 |
| Brazil | 12,787,898 |
| Uruguay or Cisplatine Republic | 284,263 |
| Argentine Republic | 1,973,852 |
| Chili | 1,670,280 |
| Peru | 165,572 |
| Sandwich Islands | 584,470 |
| China | 7,459,318 |
| Whale Fisheries | 402,890 |
| South Sea Islands | 93,118 |
| Other Countries | 1,383,272 |
| Total | Dollars 205,771,729 £ 42,869,110 |

Fisheries and Navigation.—Notwithstanding the extraordinary temptations to engage in agriculture afforded by the cheapness and facility of obtaining land, the Americans have always been distinguished by their skill in fisheries and navigation, and by the vigour and success with which they have pursued those branches of industry. They commenced the whale-fishery in 1690, and, for about fifty years, found an ample supply of fish on their own shores; but the whale having abandoned them, the American navigators entered with extraordinary ardour into the fisheries carried on in the Northern and Southern Oceans. From 1770 to 1775, Massachusetts employed annually 183 vessels, carrying 13,820 tons, in the former, and 121 vessels, carrying 14,026 tons, in the latter. Mr. Burke, in his famous speech on American affairs, in 1774, adverted to this wonderful display of daring enterprise as follows:—‘As to wealth,’ said he, ‘which the colonists have drawn from the sea by their fisheries, you had all that matter fully opened at your bar. You surely thought these acquisitions of value, for they seemed to excite your envy; and yet the spirit by which that enterprising employment has been exercised ought rather, in my opinion, to have raised esteem and admiration. And pray, sir, what in the world is equal to it? Pass by the other parts, and look at the manner in which the New England people carry on the whale fishery. While we follow them among the tumbling mountains of ice, and behold them penetrating into the deepest frozen recesses of Hudson’s Bay and Davis’s Straits; while we are looking for them beneath the Arctic circle, we find that they have pierced into the opposite region of polar cold; that they are at the antipodes, and engaged under the frozen serpent of the south. Falkland Island, which seemed too remote, and too romantic an object for the grasp of national ambition, is but a stage and resting-place for their victorious industry. Nor is the equinoctial heat more discouraging to them than the accumulated winter of both poles. We learn that while some of them draw the line or strike the harpoon on the coast of Africa, others run the longitude and pursue their gigantic game along the coast of Brazil. No sea, but what is vexed with their fisheries; no climate that is not witness to their toils. Neither the perseverance of Holland, nor the activity of France, nor the dexterous and firm sagacity of English enterprise, ever carried this most perilous mode of hardy industry to the extent to which it has been pursued by this recent people—a people who are still in the gristle, and not hardened into manhood.’

The progress of American shipping is exhibited in the subjoined table, which gives the registered sail-tonnage, as well as the total tonnage, of the United States from the year 1789 till the year 1863:—

| Year ending | Registered Sail Tonnage | Total Tonnage |
|---------------|-------------------------|---------------|
| | Tons | Tons |
| Dec. 31, 1789 | 123,893 | 201,562 |
| „ 1790 | 346,254 | 274,377 |
| „ 1791 | 362,110 | 502,146 |
| „ 1792 | 411,438 | 564,457 |
| „ 1793 | 367,734 | 520,764 |
| „ 1794 | 438,863 | 628,618 |
| „ 1795 | 529,471 | 747,965 |
| „ 1796 | 576,733 | 831,899 |
| „ 1797 | 597,777 | 876,913 |
| „ 1798 | 603,376 | 898,328 |
| „ 1799 | 662,197 | 939,409 |
| „ 1800 | 559,921 | 972,492 |
| „ 1801 | 632,907 | 947,577 |
| „ 1802 | 560,360 | 892,104 |

| Year ending | Registered Sail Tonnage | Total Tonnage |
|----------------|-------------------------|---------------|
| | Tons | Tons |
| Dec. 31, 1803 | 597,157 | 949,172 |
| „ 1804 | 672,530 | 1,042,404 |
| „ 1805 | 749,341 | 1,140,368 |
| „ 1806 | 808,265 | 1,208,716 |
| „ 1807 | 848,307 | 1,268,548 |
| „ 1808 | 769,054 | 1,242,590 |
| „ 1809 | 910,059 | 1,350,281 |
| „ 1810 | 984,269 | 1,424,784 |
| „ 1811 | 768,852 | 1,232,502 |
| „ 1812 | 760,624 | 1,269,997 |
| „ 1813 | 674,853 | 1,166,629 |
| „ 1814 | 674,633 | 1,159,210 |
| „ 1815 | 854,295 | 1,368,128 |
| „ 1816 | 800,760 | 1,372,219 |
| „ 1817 | 800,725 | 1,399,912 |
| „ 1818 | 606,080 | 1,225,185 |
| „ 1819 | 612,930 | 1,260,751 |
| „ 1820 | 619,048 | 1,280,167 |
| „ 1821 | 619,898 | 1,298,958 |
| „ 1822 | 628,150 | 1,324,609 |
| „ 1823 | 639,921 | 1,336,586 |
| „ 1824 | 669,973 | 1,389,163 |
| „ 1825 | 700,788 | 1,428,112 |
| „ 1826 | 737,978 | 1,534,191 |
| „ 1827 | 747,170 | 1,620,808 |
| „ 1828 | 812,619 | 1,741,392 |
| „ 1829 | 650,143 | 1,260,798 |
| „ 1830 | 575,056 | 1,191,776 |
| „ 1831 | 619,575 | 1,267,847 |
| „ 1832 | 686,809 | 1,439,450 |
| „ 1833 | 749,482 | 1,606,151 |
| „ 1834 | 857,098 | 1,758,907 |
| Sept. 30, 1835 | 885,481 | 1,824,940 |
| „ 1836 | 897,321 | 1,822,103 |
| „ 1837 | 809,343 | 1,896,684 |
| „ 1838 | 819,801 | 1,885,649 |
| „ 1839 | 829,096 | 2,096,479 |
| „ 1840 | 895,610 | 2,180,764 |
| „ 1841 | 945,057 | 2,180,744 |
| „ 1842 | 970,658 | 2,092,391 |
| June 30, 1843 | 1,003,982 | 2,158,603 |
| „ 1844 | 1,061,856 | 2,280,095 |
| „ 1845 | 1,088,680 | 2,417,002 |
| „ 1846 | 1,123,999 | 2,562,084 |
| „ 1847 | 1,235,682 | 2,839,046 |
| „ 1848 | 1,344,819 | 3,154,042 |
| „ 1849 | 1,418,072 | 3,334,016 |
| „ 1850 | 1,540,769 | 3,535,454 |
| „ 1851 | 1,663,917 | 3,772,439 |
| „ 1852 | 1,819,744 | 4,138,440 |
| „ 1853 | 2,013,154 | 4,407,010 |
| „ 1854 | 2,238,783 | 4,802,902 |
| „ 1855 | 2,440,091 | 5,212,001 |
| „ 1856 | 2,401,687 | 4,871,652 |
| „ 1857 | 2,377,094 | 4,940,842 |
| „ 1858 | 2,499,742 | 5,049,808 |
| „ 1859 | 2,414,654 | 5,145,038 |
| „ 1860 | 2,448,941 | 5,353,868 |
| „ 1861 | 2,540,020 | 5,539,813 |
| „ 1862 | 2,177,253 | 5,112,165 |
| „ 1863 | 1,892,899 | 5,126,081 |

The total tonnage of the steamers included in the above statement amounted to 768,751 in 1859, to 867,937 in 1860, to 877,204 in 1861, to 710,463 in 1862, and to 572,970 in 1863.

Railways.—The following table shows the total length of the railways in each state of the United States, in each of the years 1850 and 1860, and the total cost of construction in the year 1860:—

| STATES | Mileage | |
|------------------------------|----------|----------|
| | 1850 | 1860 |
| Maine | 245.59 | 472.17 |
| New Hampshire | 465.32 | 656.59 |
| Vermont | 279.57 | 556.75 |
| Massachusetts | 1,035.74 | 1,272.96 |
| Rhode Island | 68.00 | 107.92 |
| Connecticut | 413.26 | 603.00 |
| NEW ENGLAND STATES | 2,507.48 | 3,669.39 |

| STATES | Mileage | |
|---|----------|--------------------------|
| | 1850 | 1860 |
| New York | 1,403-10 | 2,701-84 |
| New Jersey | 205-93 | 559-90 |
| Pennsylvania | 822-34 | 2,542-49 |
| Delaware | 39-19 | 136-69 |
| Maryland | 253-40 | 380-30 |
| MIDDLE ATLANTIC STATES | 2,723-96 | 6,321-22 |
| Virginia | 515-15 | 1,771-16 |
| North Carolina | 218-50 | 889-42 |
| South Carolina | 289-00 | 987-97 |
| Georgia | 643-72 | 1,404-22 |
| Florida | 21-00 | 401-30 |
| SOUTHERN ATLANTIC STATES | 1,717-37 | 5,454-27 |
| Alabama | 132-50 | 743-16 |
| Mississippi | 75-00 | 872-30 |
| Louisiana | 79-50 | 331-75 |
| Texas | — | 306-00 |
| GULF STATES | 287-00 | 2,256-21 |
| Arkansas | — | 38-50 |
| Tennessee | — | 1,197-92 |
| Kentucky | 78-21 | 569-93 |
| INTERIOR STATES, SOUTH. | 78-21 | 1,806-35 |
| Ohio | 575-27 | 2,999-45 |
| Indiana | 228-00 | 2,125-90 |
| Michigan | 342-00 | 790-30 |
| Illinois | 110-50 | 2,867-90 |
| Wisconsin | 20-00 | 922-61 |
| Minnesota | — | — |
| Iowa | — | 679-77 |
| Missouri | — | 817-45 |
| Kansas | — | — |
| INTERIOR STATES, NORTH | 1,275-77 | 11,212-38 |
| California | — | 70-05 |
| Oregon | — | 3-80 |
| PACIFIC STATES | — | 73-85 |
| New England States | 2,507-48 | 3,669-39 |
| Middle Atlantic States | 2,723-96 | 6,321-22 |
| Southern Atlantic States | 1,717-37 | 5,454-27 |
| Gulf States | 287-00 | 2,256-21 |
| Interior States, South | 78-21 | 1,806-35 |
| Interior States, North | 1,275-77 | 11,212-38 |
| Pacific States | — | 73-85 |
| TOTAL UNITED STATES | 8,589-79 | 30,793-67 |
| Cost of Construction of the Railways of the United States, in 1860 | TOTAL | Dollars 1,151,560,829 |

Coins.—The American gold coin, the Eagle, contains 232 gr. pure gold and 26 alloy. This coin is made the equivalent of 10 dollars, so that the English sovereign is equal to 4 dolls. 87 cents. The doll. is worth at par about 4s. 3d. Weights and measures same as in England.

Constitution and Government.—The government, as established in 1787, is a federal democracy. The legislative power is vested in the congress, an assembly of two separate bodies, the Senate and the House of Representatives. The senate consists of 62 mems., 2 from each state, chosen for a term of six years by the legislatures of the several states they represent. The qualifications necessary for a senator are the having attained the age of 30 years, having been a citizen of the U. States for 9 years, and being an inhab.

has a concurrent vote in the ratification of treaties and executive nominations, and the sole power to try impeachments. One-third of its number goes out of office every two years. The house of representatives is composed of mems. from the several states, elected by the people for the term of 2 years. According to an act of congress, the number of representatives is fixed at 233. And the entire 'representative population' of the different states (five slaves being reckoned equivalent to 3 free persons), as ascertained by the decennial censuses, being divided by 233, gives, of course, the population entitled to send a member to congress. Some of the returns given in the preceding table of the pop. for 1860 are not quite complete; but they are sufficiently accurate for most practical purposes. And it results from them that the representative pop. may be taken at about 21,710,000, which, being divided by 233, gives 93,170 for the representative unit. Hence the number of members which each state will be entitled to return during the next 10 years is at once ascertained by dividing its representative pop. by 93,170. Should these divisions not give, as is usually the case, the entire number of members, the deficiencies are supplied by the states which have the largest unrepresented fractional pop. Thus, Connecticut will, according to the late census, be entitled to send 3 mems. to congress, and will have, in addition, an unrepresented pop. of 91,385, so that she will be all but certain to have a 4th mem. assigned to her. During the last 10 years the representative unit was 70,680. New York, Pennsylvania, and Ohio will have the largest number of representatives in the new congress.

The qualification for representatives is, their having attained the age of 25 years, and been 7 years citizens of the U. States. The house of representatives has the sole power of impeachment, and of originating money-bills. Congress must assemble at least once a year, on the first Monday in Dec. Each house chooses its own speaker and other officers, the president of the senate being the vice-president of the U. States. Both houses are divided into a number of committees for the despatch of business, chosen by ballot. The mems. of both houses receive a salary of 8 dollars a day during their attendance, and travelling expenses of 1 dollar for every 20 m. The speakers of both houses have 16 dollars a day. The executive power is vested in the president, who is chosen by the electoral colleges of the several states for the term of 4 years; he must be 35 years of age, and a natural-born citizen who has resided for 14 years in the U. States. The president is commander-in-chief of the land and sea forces, and has power to make treaties, and appoint to the principal civil and military offices in the states, with the consent of the senate. He has a veto on bills which may have passed both houses of congress, though, if these be passed a second time by a vote of two-thirds of each house, they become law without his sanction. His salary is 25,000 dollars a year. The president is assisted by a cabinet of six ministers, who hold office during his pleasure: the secretary of state, the secretaries of the treasury, war, and navy, the post-master-general, and the attorney-general, the salaries of each being 6,000 dollars a year. Besides the general congress, each state has its own separate senate and house of representatives, elected by its inhabs. The qualifications of electors are not the same in every part of the Union, as will be seen by referring to the articles on the several states. The indi-

as to their internal administration; but no state can enter into any treaty or alliance with any foreign power, grant letters of marque and reprisal, coin money, emit bills of credit, or grant titles of nobility.

In order that the reader may be fully acquainted with the institutions and government of the United States, there is subjoined a copy of the general constitution of the Union, as agreed upon in 1787, and of the amendments that have since been made upon it.

CONSTITUTION OF THE UNITED STATES.

We the people of the U. States, in order to form a more perfect union, establish justice, insure domestic tranquillity, provide for the common defence, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this constitution for the U. States of America:—

ARTICLE I.

SECT. I.—All legislative powers herein granted shall be vested in a congress of the U. States, which shall consist of a senate and house of representatives.

SECT. II.—1. The house of representatives shall be composed of members chosen every second year, by the people of the several states; and the electors in each state shall have the qualifications requisite for electors of the most numerous branch of the state legislature.

2. No person shall be a representative who shall not have attained to the age of 25 years, and been seven years a citizen of the U. States, and who shall not, when elected, be an inhabitant of that state in which he shall be chosen.

3. Representatives and direct taxes shall be apportioned among the several states which may be included within this union according to their respective numbers, which shall be determined by adding ■ the whole number of free persons, including those bound to service for a term of years, and excluding Indians not taxed, three-fifths of all other persons. The actual enumeration shall be made within three years after the first meeting of the congress of the U. States, and within every subsequent term of ten years, in such manner as they shall by law direct. The number of representatives shall not exceed one for every thirty thousand, but each state shall have at least one representative; and, until such enumeration shall be made, the state of New Hampshire shall be entitled to choose 3; Massachusetts, 8; Rhode Island and Providence Plantations, 1; Connecticut, 5; New York, 6; New Jersey, 4; Pennsylvania, 8; Delaware, 1; Maryland, 6; Virginia, 10; North Carolina, 5; South Carolina, 5; and Georgia, 3.

4. When vacancies happen in the representation from any state, the executive authority thereof shall issue writs of election to fill such vacancies.

5. The house of representatives shall choose their speaker and other officers, and shall have the sole power of impeachment.

SECT. III.—1. The senate of the U. States shall be composed of two senators from each state, chosen by the legislature thereof, for six years, and each senator shall have one vote.

2. Immediately after they shall be assembled, in consequence of the first election, they shall be divided as equally as may be into three classes. The seats of the senators of the 1st class shall be vacated at the expiration of the second year, of the 2nd class at the expiration of the fourth year, and of the 3rd class at the expiration of the sixth year, so that one-third may be chosen every second year; and if vacancies happen by resignation, or otherwise, during the recess of the legislature of any state, the executive thereof may make temporary appointments until the next meeting of the legislature, which shall then fill such vacancies.

3. No person shall be a senator who shall not have attained to the age of 30 years, and been nine years a citizen of the U. States, and who shall not, when elected, be an inhabitant of that state for which he shall be chosen.

4. The vice-president of the U. States shall be president of the senate, but shall have no vote, unless they be equally divided.

5. The senate shall choose their other officers, and

also a president pro tempore, in the absence of the vice-president, or when he shall exercise the office of president of the U. States.

6. The senate shall have the sole power to try all impeachments; when sitting for that purpose they shall be on oath or affirmation. When the president of the U. States is tried, the chief justice shall preside, and no person shall be convicted without the concurrence of two-thirds of the members present.

7. Judgment in cases of impeachment shall not extend further than to removal from office, and disqualification to hold and enjoy any office of honour, trust, or profit, under the U. States; but the party convicted shall, nevertheless, be liable and subject to indictment, trial, judgment, and punishment, according to law.

SECT. IV.—1. The times, places, and manner of holding elections for senators and representatives, shall be prescribed in each state by the legislature thereof; but the congress may at any time, by law, make or alter such regulations, except as to the places of choosing senators.

2. The congress shall assemble at least once in every year, and such meeting shall be on the first Monday in December, unless they shall by law appoint a different day.

SECT. V.—1. Each house shall be the judge of the elections, returns, and qualifications of its own members, and a majority of each shall constitute ■ quorum to do business; but a smaller number may adjourn from day to day, and may be authorised to compel the attendance of absent members, in such manner and under such penalties as each house may provide.

2. Each house may determine the rules of its proceedings, punish its members for disorderly behaviour, and with the concurrence of two-thirds expel ■ member.

3. Each house shall keep a journal of its proceedings, and from time to time publish the same, excepting such parts as may, in their judgment, require secrecy; and the yeas and nays of the members of either house on any question shall, at the desire of one-fifth of those present, be entered on the journal.

4. Neither house, during the session of congress, shall, without the consent of the other, adjourn for more than three days, nor to any other place than that in which the two houses shall be sitting.

SECT. VI.—1. The senators and representatives shall receive a compensation for their services, to be ascertained by law, and paid out of the treasury of the U. States. They shall in all cases, except treason, felony, and breach of the peace, be privileged from arrest during their attendance at the session of their respective houses, and in going to and returning from the same; and for any speech or debate in either house they shall not be questioned in any other place.

2. No senator or representative shall, during the time for which he was elected, be appointed to any civil office under the authority of the U. States, which shall have been created, or the emoluments whereof shall have been increased during such time; and no person holding any office under the U. States shall be a member of either house during his continuance in office.

SECT. VII.—1. All bills for raising revenue shall originate in the house of representatives; but the senate may propose or concur with amendments as on other bills.

2. Every bill which shall have passed the house of representatives and the senate shall, before it become a law, be presented to the president of the U. States; if he approve, he shall sign it; but if not, he shall return it, with his objections, to that house in which it shall have originated, who shall enter the objections at large on their journal, and proceed to reconsider it. If, after such re-consideration, two-thirds of that house shall agree to pass the bill, it shall be sent, together with the objections, to the other house, by which it shall likewise be reconsidered, and if approved by two-thirds of that house, it shall become a law. But in all such cases the votes of both houses shall be determined by yeas and nays; and the names of the persons voting for and against the bill shall be entered on the journal of each house respectively. If any bill shall not be returned by the president within ten days (Sundays excepted) after it shall have been presented to him, the same shall be a law, in like manner as if he

ment prevent its return, in which case it shall not be a law.

3. Every order, resolution, or vote, to which the concurrence of the senate and house of representatives may be necessary (except on a question of adjournment) shall be presented to the president of the U. States; and before the same shall take effect shall be approved by him, or being disapproved by him shall be repassed by two-thirds of the senate and house of representatives, according to the rules and limitations prescribed in the case of a bill.

SECT. VIII.—The congress shall have power—

1. To lay and collect taxes, duties, imposts, and excises, to pay the debts and provide for the common defence and general welfare of the U. States; but all duties, imposts, and excises shall be uniform throughout the U. States:

2. To borrow money on the credit of the U. States:

3. To regulate commerce with foreign nations, and among the several states, and with the Indian tribes:

4. To establish an uniform rule of naturalisation, and uniform laws on the subject of bankruptcies throughout the U. States:

5. To coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures:

6. To provide for the punishment of counterfeiting the securities and current coin of the U. States:

7. To establish post-offices and post-roads:

8. To promote the progress of science and useful arts, by securing, for limited times, to authors and inventors, the exclusive right to their respective writings and discoveries:

9. To constitute tribunals inferior to the supreme court:

10. To define and punish piracies and felonies committed on the high seas, and offences against the law of nations:

11. To declare war, grant letters of marque and reprisal, and make rules concerning captures on land and water:

12. To raise and support armies; but no appropriation of money to that use shall be for a longer term than two years:

13. To provide and maintain a navy:

14. To make rules for the government and regulation of the land and naval forces:

15. To provide for calling forth the militia to execute the laws of the union, suppress insurrections, and repel invasions:

16. To provide for organising, arming, and disciplining the militia, and for governing such part of them as may be employed in the service of the U. States, reserving to the states respectively the appointment of the officers, and the authority of training the militia according to the discipline prescribed by congress:

17. To exercise exclusive legislation in all cases whatsoever, over such district (not exceeding ten miles square) as may by cession of particular states, and the acceptance of congress, become the seat of the government of the U. States; and to exercise like authority over all places purchased by the consent of the legislature of the state in which the same shall be, for the erection of forts, magazines, arsenals, dockyards, and other needful buildings:—And

18. To make all laws which shall be necessary and proper for carrying into execution the foregoing powers, and all other powers vested by this constitution in the government of the U. States, or in any department or officer thereof.

SECT. IX.—1. The migration or importation of such persons as any of the states now existing shall think proper to admit shall not be prohibited by the congress prior to the year 1808; but a tax or duty may be imposed on such importation, not exceeding 10 dollars for each person.

2. The privilege of the writ of *habeas corpus* shall not be suspended, unless when in cases of rebellion or invasion the public safety may require it.

3. No bill of attainder or *ex post facto* law shall be passed.

4. No capitation or other direct tax shall be laid, unless in proportion to the census or enumeration hereinbefore directed to be taken.

5. No tax or duty shall be laid on articles exported from any state.

6. No preference shall be given by any regulation of commerce or revenue to the ports of one state over

those of another; nor shall vessels bound to or from one state be obliged to enter, clear, or pay duties in another.

7. No money shall be drawn from the treasury, but in consequence of appropriations made by law; and a regular statement and account of the receipts and expenditures of all public money shall be published from time to time.

8. No title of nobility shall be granted by the U. States; and no person holding any office of profit or trust under them, shall, without the consent of the congress, accept of any present, emolument, office, or title of any kind whatever, from any king, prince, or foreign state.

SECT. X.—1. No state shall enter into any treaty, alliance, or confederation; grant letters of marque and reprisal; coin money; emit bills of credit; make anything but gold and silver coin a tender in payment of debts; pass any bill of attainder, *ex post facto* law, or law impairing the obligation of contracts; or grant any title of nobility.

2. No state shall, without the consent of the congress, lay any imposts or duties on imports or exports, except what may be absolutely necessary for executing its inspection laws; and the net produce of all duties and imposts, laid by any state on imports or exports, shall be for the use of the treasury of the U. States; and all such laws shall be subject to the revision and control of the congress.

3. No state shall, without the consent of the congress, lay any duty of tonnage, keep troops or ships of war in time of peace, enter into any agreement or compact with another state, or with a foreign power, or engage in war, unless actually invaded, or in such imminent danger as will not admit of delay.

ARTICLE II.

SECT. I.—1. The executive power shall be vested in a president of the U. States of America. He shall hold his office during the term of four years, and, together with the vice-president, chosen for the same term, be elected as follows:—

2. Each state shall appoint, in such manner as the legislature thereof may direct, a number of electors, equal to the whole number of senators and representatives to which the state may be entitled in the congress; but no senator or representative, or person holding an office of trust or profit under the U. States, shall be appointed an elector.

3. The congress may determine the time of choosing the electors, and the day on which they shall give their votes, which day shall be the same throughout the U. States.

4. No person, except a natural born citizen, or a citizen of the U. States at the time of the adoption of this constitution, shall be eligible to the office of president; neither shall any person be eligible to that office who shall not have attained the age of 35 years, and been fourteen years a resident within the United States.

5. In case of the removal of the president from office, or of his death, resignation, or inability to discharge the powers and duties of the said office, the same shall devolve on the vice-president, and the congress may by law provide for the case of removal, death, resignation, or inability, both of the president and vice president, declaring what officer shall then act as president, and such officer shall act accordingly, until the disability be removed, or a president shall be elected.

6. The president shall, at stated times, receive for his services a compensation, which shall neither be increased nor diminished during the period for which he shall have been elected, and he shall not receive within that period any other emolument from the U. States, or any of them.

7. Before he enter on the execution of his office, he shall take the following oath or affirmation:—‘I do solemnly swear (or affirm) that I will faithfully execute the office of president of the U. States, and will, to the best of my ability, preserve, protect, and defend the constitution of the U. States.’

SECT. II.—1. The president shall be commander-in-chief of the army and navy of the U. States, and of the militia of the several states when called into the actual service of the U. States; he may require the opinion, in writing, of the principal officer in each of the executive departments, upon any subject relating to the duties of their respective offices, and he shall

have power to grant reprieves and pardons for offences against the U. States, except in cases of impeachment.

2. He shall have the power, by and with the advice and consent of the senate, to make treaties, provided two-thirds of the senators present concur; and he shall nominate, and, by and with the advice and consent of the senate, shall appoint ambassadors, other public ministers and consuls, judges of the supreme court, and all other officers of the U. States, whose appointments are not herein otherwise provided for, and which shall be established by law; but the congress may by law vest the appointment of such inferior officers, as they think proper, in the president alone, in the courts of law, or in the heads of departments.

3. The president shall have power to fill up all vacancies that may happen during the recess of the senate, by granting commissions which shall expire at the end of their next session.

SECT. III.—He shall, from time to time, give to the congress information of the state of the union, and recommend to their consideration such measures as he shall judge necessary and expedient; he may, on extraordinary occasions, convene both houses, or either of them, and in case of disagreement between them, with respect to the time of adjournment, he may adjourn them to such time as he shall think proper; he shall receive ambassadors and other public ministers; he shall take care that the laws be faithfully executed, and shall commission all the officers of the U. States.

SECT. IV.—The president, vice-president, and all civil officers of the U. States, shall be removed from office on impeachment for, and conviction of, treason, bribery, or other high crimes and misdemeanors.

ARTICLE III.

SECT. I.—The judicial power of the U. States shall be vested in one supreme court, and in such inferior courts as the congress may from time to time ordain and establish. The judges both of the supreme and inferior courts shall hold their offices during good behaviour, and shall, at stated times, receive for their services a compensation, which shall not be diminished during their continuance in office.

SECT. II.—1. The judicial power shall extend to all cases, in law and equity, arising under this constitution, the laws of the U. States, and treaties made, or which shall be made, under their authority;—to all cases affecting ambassadors, other public ministers, and consuls;—to all cases of admiralty and maritime jurisdiction;—to controversies to which the U. States shall be a party;—to controversies between two or more states;—between a state and citizens of another state;—between citizens of different states;—between citizens of the same state claiming lands under grants of different states, and between a state or the citizens thereof, and foreign states, citizens, or subjects.

2. In all cases affecting ambassadors, other public ministers and consuls, and those in which a state shall be party, the supreme court shall have original jurisdiction. In all the other cases before mentioned, the supreme court shall have appellate jurisdiction, both as to law and fact, with such exceptions, and under such regulations, as the congress shall make.

3. The trial of all crimes, except in cases of impeachment, shall be by jury; and such trial shall be held in the state where the said crimes shall have been committed; but when not committed within any state, the trial shall be at such place or places as the congress may by law have directed.

SECT. III.—1. Treason against the U. States shall consist only in levying war against them, or in adhering to their enemies, giving them aid and comfort.

2. No person shall be convicted of treason unless on the testimony of two witnesses to the same overt act, or on confession in open court.

3. The congress shall have power to declare the punishment of treason, but no attainder of treason shall work corruption of blood, or forfeiture, except during the life of the person attainted.

ARTICLE IV.

SECT. I.—Full faith and credit shall be given in each state to the public acts, records, and judicial proceedings of every other state. And the congress may, by

records, and proceedings shall be proved, and the effect thereof.

SECT. II.—1. The citizens of each state shall be entitled to all privileges and immunities as citizens in the several states.

2. A person charged in any state with treason, felony, or other crime, who shall flee from justice, and be found in another state, shall, on demand of the executive authority of the state from which he fled, be delivered up, to be removed to the state having jurisdiction of the crime.

3. No person held to service or labour in one state, under the laws thereof, escaping into another, shall, in consequence of any law or regulation therein, be discharged from such service or labour, but shall be delivered up on claim of the party to whom such service or labour may be due.

SECT. III.—1. New states may be admitted by the congress into this union; but no new state shall be formed or erected within the jurisdiction of any other state; nor any state be formed by the junction of two or more states, or parts of states, without the consent of the legislatures of the states concerned, as well as of the congress.

2. The congress shall have power to dispose of and make needful rules and regulations respecting the territory or other property belonging to the U. States; and nothing in this constitution shall be so construed as to prejudice any claims of the U. States, or of any particular state.

SECT. IV.—The U. States shall guarantee to every state in this union a republican form of government, and shall protect each of them against invasion; and on application of the legislature, or of the executive (when the legislature cannot be convened), against domestic violence.

ARTICLE V.

The congress, whenever two-thirds of both houses shall deem it necessary, shall propose amendments to this constitution, or, on the application of the legislatures of two-thirds of the several states, shall call a convention for proposing amendments, which, in either case, shall be valid to all intents and purposes, as part of this constitution, when ratified by the legislatures of three-fourths of the several states, or by conventions in three-fourths thereof, as the one or the other mode of ratification may be proposed by the congress; provided that no amendment, which may be made prior to the year 1808, shall in any manner affect the 1st and 4th clauses in the 9th section of the 1st article; and that no state, without its consent, shall be deprived of its equal suffrage in the senate.

ARTICLE VI.

1. All debts contracted, and engagements entered into, before the adoption of this constitution, shall be as valid against the U. States under this constitution as under the confederation.

2. This constitution, and the laws of the U. States which shall be made in pursuance thereof; and all treaties made, or which shall be made, under the authority of the U. States, shall be the supreme law of the land; and the judges in every state shall be bound thereby, anything in the constitution or laws of any state to the contrary notwithstanding.

3. The senators and representatives before mentioned, and the members of the several state legislatures, and all executive and judicial officers, both of the U. States and of the several states, shall be bound by oath or affirmation to support this constitution; but no religious test shall ever be required as a qualification to any office or public trust under the United States.

ARTICLE VII.

The ratification of the conventions of nine states shall be sufficient for the establishment of this constitution between the states so ratifying the same.

Done in convention, by the unanimous consent of the states present, the 17th day of September, in the year of our Lord 1787, and of the independence of the U. States of America the 12th. In witness whereof we have hereunto subscribed our names.

GEORGE WASHINGTON, President,
and Deputy from Virginia, &c.

the legislatures of the several states, twelve amendments, ten of which only were adopted. They are the first ten of the following amendments; and they were ratified by three-fourths, the constitutional number, of the states, on the 15th of December, 1791. The eleventh amendment was proposed at the first session of the third congress, and was declared in a message from the president of the U. States to both houses of congress, dated the 8th of January, 1798, to have been adopted by the constitutional number of states. The twelfth amendment, which was proposed at the first session of the eighth congress, was adopted by the constitutional number of states, in the year 1804, according to a public notice by the secretary of state, dated the 25th day of September, 1804.]

AMENDMENTS

To the constitution of the U. States, ratified according to the provisions of the 5th article of the foregoing constitution.

ART. I.—Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances.

ART. II.—A well regulated militia being necessary to the security of a free state, the right of the people to keep and bear arms shall not be infringed.

ART. III.—No soldier shall, in time of peace, be quartered in any house, without the consent of the owner, nor in time of war, but in a manner to be prescribed by law.

ART. IV.—The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

ART. V.—No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a grand jury, except in cases arising in the land or naval forces, or in the militia, when in actual service in time of war or public danger; nor shall any person be subject, for the same offence, to be twice put in jeopardy of life or limb; nor shall be compelled, in any criminal case, to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

ART. VI.—In all criminal prosecutions the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the state and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favour, and to have the assistance of counsel for his defence.

ART. VII.—In suits at common law, where the value in controversy shall exceed 20 dollars, the right of trial by jury shall be preserved; and no fact tried by a jury shall be otherwise re-examined in any court of the U. States than according to the rules of the common law.

ART. VIII.—Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishment inflicted.

ART. IX.—The enumeration, in the constitution, of certain rights, shall not be construed to deny or disparage others retained by the people.

ART. X.—The powers not delegated to the U. States, by the constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people.

ART. XI.—The judicial power of the U. States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the U. States by citizens of another state, or by citizens or subjects of any foreign state.

ART. XII.—The electors shall meet in their respec-

president, one of whom, at least, shall not be an inhabitant of the same state with themselves; they shall name in their ballots the person voted for as president, and in distinct ballots the person voted for as vice-president, and they shall make distinct lists of all persons voted for as president, and of all persons voted for as vice-president, and of the number of votes for each, which lists they shall sign and certify, and transmit sealed to the seat of the government of the U. States, directed to the president of the senate. The president of the senate shall, in the presence of the senate and house of representatives, open all the certificates, and the votes shall then be counted: the person having the greatest number of votes for president shall be the president, if such number be a majority of the whole number of electors appointed; and if no person have such majority, then from the persons having the highest numbers, not exceeding three, on the list of those voted for as president, the house of representatives shall choose immediately, by ballot, the president. But in choosing the president, the voters shall be taken by states, the representation from each state having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the states, and a majority of all the states shall be necessary to a choice. And if the house of representatives shall not choose a president, whenever the right of choice shall devolve upon them, before the 4th day of March next following, then the vice-president shall act as president, as in the case of the death or other constitutional disability of the president. The person having the greatest number of votes as vice-president shall be the vice-president, if such number be a majority of the whole number of electors appointed; and if no person have a majority, then from the two highest numbers on the list the senate shall choose the vice-president; a quorum for the purpose shall consist of two-thirds of the whole number of senators, and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of president shall be eligible to that of vice-president of the U. States.

The *judiciary power* of the U. States resides in a supreme court at Washington, and a number of district courts, one or more in each separate state, territory, and district. The supreme court consists of a chief justice, with a salary of 6,500 dolls., and nine associate judges, who each receive 6,000 dolls. a year. The U. States are divided into 10 circuits, which are travelled separately twice a year by the judges of the supreme court; and the circuit courts have jurisdiction in all criminal cases, and in civil causes to the amount of more than 500 dolls., and, in some cases, exercise a jurisdiction of appeal from the inferior courts. The laws of the U. States are based upon the common and statute law of England, but capital punishments are less frequently resorted to than in Great Britain.

Education.—Public instruction is nowhere more extensively diffused than in the N. part of the Union; and the education in the common schools is of the best description. Their attention to the education of the people, and the liberal provision made to insure that grand object, are most creditable to the American legislators. Everywhere in New England, except in Connecticut, the primary schools are supported by a property tax; and some of the states have school funds in addition, the income of which is distributed among the towns in proportion to the number of pupils educated. The common or public free schools are managed in each district by 12 directors, chosen by the people; and the children are taught gratuitously, the only expense being for books. Each town has one of these schools, and one is generally established in every rural district of 5 or 6 sq. m. The instruction which is thus brought, as it were, within reach of every body, embraces the rudiments of English education, including arithmetic and geography; and, in the larger towns, Latin and Greek.

The principles of this system, its adaptation to

probable influence over the character and condition of the people, were set in the most striking point of view in a speech delivered by Mr. Webster, in an assembly held in Massachusetts in 1821:— 'For the purpose of public instruction,' said he, 'we hold every man subject to taxation in proportion to his property, and we look not to the question whether he himself have or have not children to be benefited by the education for which he pays: we regard it as a wise and liberal system of policy, by which property, and life, and the peace of society, are secured. We seek to prevent, in some measure, the extension of the penal code, by inspiring a salutary and conservative principle of virtue and of knowledge in an early age. We hope to excite a feeling of respectability and a sense of character, by enlarging the capacities and increasing the sphere of intellectual enjoyment. By general instruction we seek, so far as possible, to purify the moral atmosphere; to keep good sentiments uppermost; and to turn the strong current of feeling and opinion, as well as the censures of the law, and the denunciations of religion, against immorality and crime. We hope for a security beyond the law and above the law, in the prevalence of enlightened and well principled moral sentiment. We hope to continue and to prolong the time, when, in the villages and farm-houses of New England, there may be undisturbed sleep within unbarred doors. Knowing that our government rests directly upon the public will, that we may preserve it we endeavour to give a safe and proper direction to that public will. We do not, indeed, expect all men to be philosophers, or statesmen; but we confidently trust, and our expectation of the duration of our system of government rests upon the trust, that by the diffusion of general knowledge, and good and virtuous sentiments, the political fabric may be secure, as well against open violence and overthrow, as against the slow but sure undermining of licentiousness. We rejoice that every man in this community may call all property his own, so far as he has occasion for it to furnish for himself and his children the blessings of religious instruction and the elements of knowledge. This celestial and this earthly light he is entitled to by the fundamental laws. It is every poor man's undoubted birthright; it is the great blessing which this constitution has secured to him; it is his solace in life, and it may well be his consolation in death, that his country stands pledged, by the faith which it has plighted to all its citizens, to protect his children from ignorance, barbarism, and vice.'

Out of New England an adequate provision for public schools exists in all the populous states, as Pennsylvania, New Jersey, Maryland, and Virginia; and whites may everywhere procure free education. In the newly settled states the provision for the support of common schools has been settled by congress; and every township is divided in 36 sections of a sq. m. each, one of which is appropriated to the support of schools. Superior instruction is, also, provided for in the most liberal manner, partly by the central and local governments, and partly by private individuals and associations. Academies of various degrees of excellence are found in every part of the Union. In these the ancient and modern languages, grammar, history, logic, rhetoric, natural and moral philosophy, are taught. There are, besides, about 120 colleges and universities, supported by different religious denominations or by the states; and, in the more populous parts of the country, there are but few districts of any considerable extent without one or more of these institutions. The principal are Harvard University in Massachusetts,

Yale College in Connecticut, Dartmouth Union and Rutgers Colleges. There are about 40 theological, 35 medical, and 13 law schools, the last of which are the least frequented.

Army.—By the eighth section of the first article of the constitution of the United States, Congress is empowered, in general, 'to raise and support armies;' and, by the second section of the second article, the president is appointed commander-in-chief of the army and navy, and of the militia when called into the service of the United States.' On August 7, 1789, congress established a department of war as the instrument of the president in carrying out the provisions of the constitution for military affairs. A number of 'Original Rules and Articles of War' were enacted by the congress of 1776, and continued in force under the constitution, with several modifications. These rules were the basis of the actual Articles of War which were enacted in 1806, and have been but slightly altered since that time. They form the military code which governs all troops when mustered into the service. In 1790, the rank and file of the army, as fixed by act of congress, amounted to 1,216 men; to which force, in the next year, one regiment 900 strong was added. In 1792, an act of congress provided for a uniform militia throughout the United States, and the system then arranged has received but slight alterations until the present time. The nominal strength of the militia thus organised is given in a statement below. In 1796, the regular army consisted essentially of a corps of artilleryists and engineers, two companies of light dragoons, and four regiments of infantry of eight companies each. This force was little increased, except during occasional periods, till the outbreak of the civil war.

At the breaking out of the civil war, in the commencement of the year 1861, the United States army consisted of about 14,000 regular troops, stationed chiefly in the Southern States. A large number of these joined the cause of the Confederate States, reducing the Federal army to less than 5,000 men. On April 15, 1861, the president called out 75,000 volunteers for three months, to defend the capital, which was threatened; and on May 3, he called out 42,000 volunteers to serve for three years or the war. On July 22, 1861, Congress passed an act authorising the president to accept the services of 500,000 volunteers for such terms as he might deem necessary, ranging from six months to three years or during the war. On July 25, 1861, the president was again authorised to call out 500,000, making in all 1,000,000 men. The number proving insufficient for the active prosecution of hostilities, and the repair of losses occasioned by the war, a draft was ordered in the summer of 1863, by proclamation of the president of the United States. Exemption from the draft, however, was to be purchased by payment of a sum of 300 dollars to the government. This latter clause was repealed in July 1864, when a bill passed the congress that all men drafted must either serve personally or furnish a substitute. By a new proclamation of the president of the United States, dated October 17, 1863, a levy of 300,000 men was ordered, and another call of 500,000 men was made, February 1, 1864. The total number of men called into the field by the government of the United States, from 1861 till the end of the civil war, in 1865, amounted to 2,039,748. Of these it is calculated that 580,000 died from wounds and disease. The Southern, or Confederate, States had in the field, during the greater part of the war, an army of 400,000 men, of which, it is estimated, they lost 300,000 from wounds and disease. The Southern

army was entirely disbanded in April, 1865; but of the Northern army there remained about 60,000 men under arms at the end of 1865.

Navy.—For a period of nine years after the Government of the United States was organised, there was no navy department. The executive duties growing out of the management of the naval forces had been committed by congress to the war department by an act approved August 7, 1789. It was not until April 30, 1798, that a separate department was created, with a chief officer called the secretary of the navy.

The naval forces of the United States, at the commencement of the year 1861, consisted of 41 men-of-war on active service. A vast increase of the navy was decided on soon after the outbreak of civil war, with the result of creating, at the end of June, 1864, a fleet of war of 622 vessels of all classes—432 of them steamers, and 74 iron-clads and rams. The naval force is divided into nine squadrons, namely, the North Atlantic, the South Atlantic, the East Gulf, the West Gulf, the Mississippi, the Special West India, the Pacific, the East India and Mediterranean, and the Potomac flotilla. The following statement gives a summary of the navy of the United States at the end of June, 1864:—

| | No. of Vessels | No. of Guns | Tonnage |
|------------------------------------|----------------|-------------|---------|
| Iron-clad Steamers, Coast Service | 46 | 150 | 62,518 |
| Iron-clad Steamers, Inland Service | 29 | 152 | 29,784 |
| Paddle-wheel Steamers | 203 | 1,240 | 120,517 |
| Screw Steamers | 198 | 1,578 | 187,892 |
| Sailing Vessels | 112 | 1,323 | 70,256 |
| Total | 588 | 4,443 | 467,967 |

There are but few ships of the line and frigates in the United States navy. The greater number of vessels are sloops-of-war, brigs, barks, schooners, and gunboats, armed with from two to ten guns, and of less than a thousand tons burthen. Most of the iron-clad steamers are so-called 'Monitors.' All the vessels of this class are completely plated from the upper deck to 4 or 5 ft. below water, and from stem to stern; but the hulls of the smaller 'Monitors' are but twelve to eighteen inches out of water in action.

There are eight navy-yards in the United States; those of Portsmouth, in New Hampshire, Charleston, near Boston, New York, Philadelphia, Washington (where all the anchors, cables, and blocks required are made), Portsmouth, in Virginia, Pensacola, in Florida and Brooklyn.

Revenue and Expenditure.—The following table shows the total amount of the revenue and expenditure of the United States, in each year (ending 30th June) from 1861 to 1863.

| Years ended 30th June | Revenue, including Loans | | Expenditure | |
|-----------------------|--------------------------|-------------|-------------|-------------|
| | Dollars | £ | Dollars | £ |
| 1861 | 83,371,640 | 17,369,092 | 85,387,313 | 17,789,023 |
| 1862 | 581,621,181 | 121,172,537 | 570,841,700 | 118,925,354 |
| 1863 | 889,379,653 | 185,287,426 | 895,796,631 | 186,624,298 |

To the total revenue of 1863, the customs contributed 69,059,642 dollars; the sale of lands, 167,617; direct taxes, 1,485,104; internal duties, 87,640,788; and loans, 776,682,362 dollars. It will be seen that more than seven-eighths of the total revenue was derived from loans.

The principal branches of the public expendi-

ture of the United States, in each of the years 1862 and 1863, were as follows:—

| Branches of Expenditure | 1862 | 1863 |
|---------------------------|-------------|-------------|
| | Dollars | Dollars |
| Civil List | 5,939,009 | 6,350,619 |
| Foreign Intercourse | 1,339,710 | 1,231,413 |
| Naval Department | 42,674,570 | 63,211,105 |
| War Department | 394,368,407 | 599,298,601 |
| Pensions | 879,583 | 3,140,194 |
| Indian Department | 2,223,402 | 1,076,326 |
| Miscellaneous | 14,120,772 | 15,671,890 |
| Public Debt | 109,287,247 | 205,816,482 |
| Total Expenditure { Dols. | 570,841,700 | 895,796,630 |
| { £ | 118,925,354 | 186,624,298 |

Public Debt.—The public debt of the United States, which has risen to very large proportions within the last few years, is a consequence chiefly of the great civil war of 1861-65. Previously, the debt of the republic was insignificant. It amounted to 75,463,476 dollars in 1791, had risen to 127,334,933 dollars in 1816; but in 1840 had fallen as low as 5,125,077 dollars. In 1860, the year previous to the civil war, it amounted to 76,159,667 dollars, and, during the next four years, rose at an enormous rate, as shown in the following table:—

| Years ended July 1st | Public Debt of the United States | |
|----------------------|----------------------------------|-------------|
| | Dollars | £ |
| 1861 | 90,867,829 | 18,980,797 |
| 1862 | 514,211,872 | 107,127,369 |
| 1863 | 1,098,792,181 | 228,915,248 |
| 1864 | 1,662,708,800 | 346,397,667 |

On the 1st of July, 1865, several months after the actual close of the civil war, the total debt of the United States amounted to 551,450,655*l.*, and the total interest thereon to 27,852,494*l.* per annum, or about a million sterling more than the interest on the debt of the United Kingdom.

Historical Notice.—The first English settlement in America was made in Virginia, by a private company, in 1607; and, during the civil wars of the subsequent period, the pop. of the states was successively augmented by numbers of Puritans from the mother country, who settled in New England, R. Catholics in Maryland, defeated Royalists in Virginia, with numbers of Swedes, Germans, and others. The settlement of the several colonies, down to 1776, when the revolutionary war broke out, took place as follows:—

| Colonies | Settled | Colonies | Settled |
|------------------|---------|---------------------------------|---------|
| 1. Virginia | 1607 | Rhode Island | 1638 |
| 2. New Hampshire | 1623 | 9. North Carolina | 1650 |
| 3. New Jersey | 1624 | 10. New York (previously Dutch) | 1664 |
| 4. Delaware | 1627 | 11. South Carolina | 1670 |
| 5. Massachusetts | 1628 | 12. Pennsylvania | 1682 |
| 6. Maryland | 1633 | 13. Georgia | 1733 |
| 7. Connecticut | 1635 | | |
| 8. Providence | 1636 | | |

The delegates of the above colonies, afterwards called states, signed the memorable Declaration of Independence on the 4th of July 1776.

The existence of the United States, as a separate and independent nation, usually dates from July 4, 1776; but the colonies were virtually under their own government from the time of the meeting of the second continental congress, May 10, 1775, which body continued its sittings during the greater part of the revolutionary war, and had the general direction of affairs. The powers of this

congress were not defined,—there was no settled form of government; but, their authority being of a revolutionary or provisional character, they exercised such as the necessities of the times required. The revolutionary government continued until the confederation was organised, the articles for which were adopted by the congress as early as November 15, 1777, but were not finally ratified by all the colonies until March 1, 1781. On the following day (March 2, 1781) congress assembled under the confederation. The confederate government was intended to be perpetual; but it was soon found to be so defective, inefficient, and even powerless, that a convention of delegates was called to meet at Philadelphia on the 14th of May, 1787, 'for the sole and express purpose of revising the articles of confederation, and reporting such alterations and provisions therein as shall render the Federal Constitution adequate to the exigencies of the government and the preservation of the Union.' The constitutional government was the result of the deliberations of this convention; for they adopted, on the 17th of September, 1787, the charter known as the Constitution of the United States. Eleven of the states having ratified this constitution, congress, on the 17th of September, 1788, resolved that it should go into operation on Wednesday, the 4th day of March, 1789.

The United States, from this period, continued to flourish until they became involved in the wars that raged between Great Britain and France, and at length, in June 1812, took up arms against the British for the vindication of their rights as a neutral power. The American commerce now fell off to a very low ebb, and the states suffered considerably from the more direct consequence of the war. In 1814, peace having been concluded in Europe, the question in dispute between Britain and America ceased entirely, in a practical view, to possess any interest. Accordingly, the commissioners of the two powers, who had met at Ghent, agreed to adjourn the controversy, and in December a treaty of peace was signed between them.

The history of the United States was one of almost uninterrupted prosperity from this period till the breaking out of the great civil war, at the commencement of the year 1861. Dissatisfied with the election of President Lincoln, eleven of the Southern States seceded from the Union, in the following order:—

| | |
|----------------|-------------------------------|
| South Carolina | Dec. 20, 1860, by Convention. |
| Mississippi | Jan. 8, 1861, " " |
| Florida | Jan. 10, " " " |
| Alabama | Jan. 11, " " " |
| Georgia | Jan. 19, " " " |
| Louisiana | Jan. 26, " " " |
| Texas | Feb. 1, " " Legislature. |
| Virginia | April 25, " " Convention. |
| Arkansas | May 6, " " Legislature. |
| North Carolina | May 20, " " " |
| Tennessee | June 8, " " " |

The above states having organised a separate government, under the name of the 'Confederate States,' the people faithful to the Union resolved to bring them back to the old form of government, and succeeded in doing so after a gigantic struggle extending over four years, at an immense cost of blood and treasure. But great as was the struggle was its fruit, since it resulted in the total abolition of slavery, and the opening of a nobler career than ever before entered upon by the people of the United States.

UNTERWALDEN, one of the four forest cantons of Switzerland, near the centre of the confed., in which it holds the 6th rank; between lat. 46° 40' and 47° N., and long. 8° and 55' E.,

having W. Lucerne; N. the same cant., and the Lake of Lucerne; E. Uri; and S. the Bernese Oberland. Area, 262 sq. m. Pop. 24,960 in 1860, of whom 13,399 belonged to U. and 11,561 to L. Unterwalden. The territory consists principally of 4 valleys, inclosed by mountains of various heights, the loftiest of which, the Titlis, rises to nearly 11,000 ft. above the sea. Two streams called Aa, hardly deserving the name of rivers, flow into the Lake of Lucerne; and there are several small lakes and numerous cascades. The climate is temperate, particularly in the E., where various kinds of fruit are grown. The valleys and lower hills afford fine pasturage, which makes cattle-breeding the chief occupation of the inhabs. The cattle are small, but a good cow is estimated to yield a profit of from 50 to 100 florins a year to the owner; and about 10,000 head of cattle are annually depastured in the canton. The cheese of Unterwalden is reckoned inferior only to that of the Emmenthal; and considerable quantities are sent into Italy. In good years the value of the cheese exported from the valley of Engelberg amounts to about 40,000 florins. Agriculture is comparatively neglected; and corn, to the value of at least 120,000 florins, has to be imported from Lucerne. The vine does not succeed, and the place of wine is supplied by liquors made from different fruits. The forests are a chief source of wealth, a good deal of timber and fuel being exported. Pine and fir, and, after these, beech, oak, and elm, are the principal trees. The extensive forest of Kernvald has formed the line of separation between the republics of Lower or N., and Upper or S., Unterwalden, ever since the 12th century. Mining and manufactures are insignificant; some linen thread is, however, spun in the valley of Engelberg.

In both parts of the canton, the constitution is wholly democratic. Upper Unterwalden consists of 7 communes, all the male inhabs. of which above 20 years of age meet in a general assembly, exercising the sole deliberative and legislative power, on the last Sunday in April, at the cap. Sarnen. The executive body, consisting of 14 principal functionaries, chosen by the general assembly, and 65 other mems. appointed by the different parishes, exercises all the high judicial and other functions, except in case of capital punishment; when the *triple council*, an assembly composed partly of special delegates, must pass sentence. Lower Unterwalden consists of 18 communes. Its general assembly is similarly constituted; but its government, carried on at Stanz, the cap., is more complicated than that of the other part of the canton, being conducted by a great variety of councils and assemblies. Public education is everywhere rather backward. Both parts of the canton have but one united voice in the Swiss diet; they contribute 382 men to the Swiss army, and 1,907 fr. a year to the federal treasury.

Unterwalden, with Uri and Schwytz, formed the nucleus of the Swiss Confederation early in the 14th century; but little worth notice has occurred in its subsequent history, except that the inhabs. of Lower Unterwalden made a vigorous opposition to the French revolutionary troops in 1798, for which they suffered proportionally.

UPSAL, or UPSALA, a city of Sweden, cap. prov. of same name, on the Sala, by which it is divided into two parts, 37 m. N. by W. Stockholm. Pop. 8,795 in 1861. Upsala is a fine, old-fashioned city. Only a few of the inhabs. are engaged in manufactures, or in the little trade carried on by the river, on which a steam navigation is kept up with Stockholm. The greater number depend for support on the university, the

principal in the kingdom. This establishment was founded by Steno Sture in 1478, and modelled on the university of Paris. It was warmly patronised by Gustavus Vasa, who was partly educated in it. At a subsequent period, however, it was transferred to Stockholm, but was again restored to Upsal by Charles IX. It has long enjoyed a very extensive celebrity, and is at present attended by from 1,350 to 1,450 pupils, though of these only from 800 to 900 may be resident at any one time. The students, like those of Scotland and Germany, lodge in the town. Their average expenditure may be estimated at about 30*l.* for the session. As many as 150 students are maintained free of expense from endowments left by Gustavus Adolphus. The public lectures are all gratuitous, and but few private lectures are attended. Most of the professors lecture in their own houses. None have a salary of more than 300*l.* a year, and many have much less. The new university is a handsome and spacious edifice, built of freestone, in the Florentine style of architecture. Most part of it has been devoted to two splendid halls, one on the first story of the principal library, and another on the second for oratorios, and the conferring of academic degrees. The ground-floor is occupied by the library, comprising 100,000 volumes. The greatest curiosity in this collection is a manuscript of the four gospels, called, from its silver letters, the *Codex Argenteus*, supposed to be a copy of the Gothic translation made by Ulphilas, the apostle of the Goths, in the 4th century. Much controversy has existed among the learned as to the characters in which this famous codex is written; especially whether it be in those used by the Goths of Mœsia, ancestors of the present Swedes, or in the Frankish idiom. At all events, however, there can be no doubt of its high antiquity; it is admitted on all hands not to be later than the 6th century, and may be of the 4th or 5th, while it has the farther advantage of having been translated from the original Greek. The codex was found in 1597, in the library of the Benedictine abbey of Werden, in Westphalia; and having found its way (whether honestly is doubtful) into the library of Isaac Vossius, was, on his death, purchased for the comparatively trifling sum of 250*l.*, by the Count de la Gardie, who presented it to the university. In the same edifice are preserved a beautiful cabinet, presented to Gustavus Adolphus by the city of Augsburg in 1632; and the large chest, sealed and left by Gustavus III., with instructions that it should not be opened till 50 years from the day of his death. Here, also, is a botanic garden, and a museum, in which is a fine statue of Linnæus by Bystrom. This university has had many celebrated individuals among its professors, especially in the department of natural history: among others may be specified Linnæus, Bergman, and Afzelius.

The cathedral is an imposing edifice, though built only of brick: in some respects its appearance is similar to that of Notre Dame at Paris. It is 350 feet in extreme length, with a lofty nave and a magnificent altar. The Swedish monarchs were formerly crowned in this cathedral, and here, also, they are mostly interred. Among the numerous tombs, the most interesting is that of Gustavus Vasa; distinguished in every station of life, and equally great as a legislator, a warrior, and a politician. Linnæus, also, is entombed in this cathedral, and the house is still shown which he occupied in the town.

Upsal has some public walks, on one of which a

Gustavus Adolphus. It is the metropolitan see of Sweden, and possesses an ecclesiastical school, a cosmographic and other scientific societies.

UPTON ON SEVERN, a market town and par. of England, co. Worcester, hund. Pershore, on the Severn, 9 m. S. Worcester. Area of par. 3,110 acres. Pop. of do. 2,676 in 1861. The town is neatly built with well-paved streets. The church, rebuilt in 1758, is a handsome structure. The Baptists, and other sects, have also places of worship. A charity school for 16 girls, founded and endowed in 1718, to which a boys' school was attached in 1797, has been incorporated with 2 national schools, supported by voluntary contribution. A subscription library has been founded. The river, which is navigable thus far for vessels of 100 tons, has a commodious wharf and a good harbour for barges. It has no manufacture of any importance; but a considerable trade is carried on in corn, malt, and coals; and a good deal of cider is brought here for shipment from Hereford and other parts.

URBINO (an. *Urbium Hortense*), a fortified town of Central Italy, prov. Urbino e Pesaro, on a mountain near the Metauro, 20 m. SW. Pesaro. Pop. 15,095 in 1862. Its fortifications are a good specimen of the military works of the 14th century. Its old castle now forms part of a Carmelite convent, in which and in the churches are several fine works by Raphael and other distinguished artists. Urbino has an ancient ducal palace, which, like the Palazzo Albani, is a large and fine building; a newly built cathedral, with a rich chapter and archbishopric; a university, with about 200 students; a college, hospital, seminary, an association called by the singular title of *Academia Assurditorum*, and a court of primary jurisdiction. But the legate and other chief authorities of the legs. of Urbino and Pesaro reside at the latter town. Urbino is celebrated for its brass, manufactured to the value of about 14,000 crowns a year.

Among other illustrious individuals, Urbino has to boast of having given birth to Raphael, hence called by the Italians Raffaello d'Urbino, unquestionably the greatest painter of modern times. He was born on Good Friday, 1483, and died at Rome in 1520, on the anniversary of his birth, at the early age of 37—a wonderfully brief space in which to have attained to such matchless proficiency, and to have completed so many great works. This was also the birthplace of Bramante, one of the greatest modern architects, a relative of Raphael; of the machinist Zabaglia, and other distinguished personages.

URI, a canton of Switzerland, in the SE. part of the confed., between the 46th and 47th degs. of N. lat., and 8° 30' and 9° E. long.; having N. Schwytz and the Lake of Lucerne, E. Glarus and the Grisons, S. Tessin, and W. the Valais, the Bernese Oberland, and Unterwalden. Area, 420 sq. m. Pop. 14,761 in 1861. The canton consists mostly of one principal valley, that of the Reuss, into which several others open laterally; and the whole are shut in, except at the N. and S. extremities of the canton, by lofty and generally impassable mountains. Among the mountains comprised in this canton is the celebrated St. Gothard, the passage across which is the principal route from Italy into E. Switzerland. The transit trade by this road was, and to some extent still is, the most profitable occupation of the inhabs. of Uri. Various other lofty and remarkable summits are included in the ranges surrounding the canton. The principal river is the Reuss, which rises in Mount St. Gothard, and after a course usually N. through Uri, in its whole

length, falls into the Lake of Lucerne, near Altorf. Besides the Lake of Uri (the S. extremity of that of Lucerne) there are numerous small alpine lakes; and the canton is a good deal visited by strangers, both on account of its sublime scenery and the historical interest attached to it as the land of Tell, said to have been a native of Bürglen, near Altorf.

The pastures of this canton are very superior, and these and their cattle constitute the entire wealth of the inhabs. A good many cattle, tended by Bergamesque cowherds, are sent thither from Italy to feed during summer. The cheese of the canton is in high repute, but it is not extensively produced; and the stock of sheep, goats, and hogs is not more than sufficient for the wants of the pop. Agriculture is entirely neglected. The aspect of the country is thus described by an English traveller:—'Throughout the whole of the upper part of the valley of the Reuss and in the vale of Ursern, not one stalk of any kind of grain, nor one cultivated vegetable of any kind, is to be seen. There is no doubt, however, that these might be successfully cultivated. The vale of Ursern is better sheltered than almost any part of the Engadine, and is less elevated than many other parts where rye is grown abundantly, where other grain, even wheat, is not a failure, and where all the hardier vegetables are plentiful. About two leagues lower down than Andermat, the valley widens. Cottages are sprinkled here and there, and now and then a hamlet; still, however, grass only was to be seen. I saw many warm stripes, and even little plains, along the river side, where wheat and vegetables could have been successfully cultivated; but I still continued to meet carts laden with flour and potatoes. As I descended still lower in the valley, the scenery became more varied and more beautiful. Charming meadows lay by the river side, prettily diversified by clumps of walnut and pear trees, and cottages and hamlets thickly dotted the slopes. Altorf is surrounded by gardens and orchards; yet even here, where the climate is mild, and where the ordinary fruits come to great perfection, scarcely an ear of corn is to be seen.' This, however, does not originate in any want of industry, but in what is most probably a well founded conviction on the part of the inhab., that it is most advantageous for them to confine their attention to the breeding and depasturing of cattle, and to import their corn, flour, and other provisions, and such manufactured goods as they do not produce in their cottages.

Uri is subdivided into two districts, Uri and Ursern: Altorf is the cap. The constitution is strictly democratic. The legislative power resides in the general assembly, composed of all the male pop. above 20 years of age, which assembles every year on the first Sunday in May, to choose the cantonal council of 44 mems., to which is confided the direct executive power. There are several inferior councils for separate departments of service. Each district has its own assembly and tribunals; and in the cap. is a tribunal of appeal, composed of 15 mems., and presided over by the *landammann*. The communes are generally too poor to support public schools all the year round, and education is very backward. The inhabs. are under the ecclesiastical jurisdiction of the bishop of Chur: they are mostly of the German stock, though in the S. an Italian dialect is spoken. Contingent to the Swiss army, 236 men; do. of money to the federal treasury, 1,184 fr. a year. This canton is supposed to have derived its name from the *urus*, or wild bull, which formerly inhabited its valleys in great numbers. Uri was one

of the three cantons which revolted from the German empire in 1307, and formed the nucleus of the Swiss confed. It was a principal theatre of war between the French and Austrians, in 1799–1800.

URUGUAY, or BANDA ORIENTAL, a republic of South America, between lat. 30° and 35° S, and long. 52° and 59° W.; having N. Brazil, E. and S. the Atlantic Ocean and the æstuary of the La Plata, and W. the Uruguay river, by which it is separated from the Argentine or La Plata territories. Area, 73,538 sq. m.; pop. 240,965 in 1860. The coast presents the aspect of a low flat plain, without wood of any kind, and, as far as the eye can reach, quite level in appearance with the water. Inland, however, and particularly in the N., the country is intersected by many hill-ranges alternating with valleys traversed by considerable affluents of the Uruguay. In this territory, the humidity of the soil, which is watered by numerous rivers, is corrected by the pampero, a remarkable dry wind. The climate of Uruguay is proverbially healthy, and it is evident that the thinness of the pop. must arise from the mode of life followed by the settlers, or from political causes, and not from any deficient fertility of the soil, or other natural or necessary cause. It is divided into 9 depts., and possesses 3 principal towns, Monte Video, La Colonia, and Maldonado, 15 small towns, and 8 hamlets, without including estancias or farms, and ranchos or cottages. The public revenue for the 18 months, July 1, 1860, to Dec. 31, 1861, amounted to 715,960*l.*, with the same expenditure. The public debt, in Feb. 1862, was about 4,000,000*l.* On the ordinary peace-footing, the army is composed of little more than 2,000 men; but in the spring of 1865, when Uruguay, in alliance with Brazil and the Argentine republic, entered war against Paraguay, it was raised to 8,500 men.

Monte Video, having a better port and as good a government, bids fair to become a city of greater trade and wealth than its opposite rival, Buenos Ayres. (For its trade and that of the republic generally, see the art. MONTE VIDEO.)

Uruguay is an integral, not a federal republic: it formed a prov., under the gov of Buenos Ayres, till 1821, when it was taken by the Brazilians, and incorporated with Brazil under the title of Prov. Cisplatina. In 1825, however, it declared itself independent; and its independence was recognised in 1828 by a treaty between Brazil and La Plata.

URUMEA, OORMIAH, or SHAHEE, a town and considerable lake of Persia, prov. Azerbijan. The town stands in a fine plain, watered by the Shar, 8 m. W. the lake, and 65 m. SW. Tabriz. Its pop. has been roughly estimated at 12,000. It is fortified with a strong wall and deep ditch, which may be filled with water from the river. Though supposed to be the *Thebarma* of Strabo, it is said to possess no remains of antiquity worth notice: it has, however, been rarely, if at all, visited by recent European travellers.

The lake of Urumea, or Shahee, was visited by Major Rawlinson in 1838. It extends above a degree of lat. in length, and is about one-third of that distance in extreme breadth. The greatest depth of water that is found in any part is four fathoms, the average is about two fathoms, but the shores shelve so gradually that this depth is rarely attained within 2 m. of the land. The specific gravity of the water, from the quantity of salt which it retains in solution, is so great, that a vessel of 100 tons' burden has a draught of no more than 3 or 4 feet. This heaviness of the water prevents the lake from being much affected

by storms, which, from its extreme shallowness, would otherwise render its navigation dangerous. A gale of wind raises the waves but a few feet; and, as soon as the storm has passed, they subside. It is an old opinion that the waters of this lake are too salt to support animal life. No fish, certainly, are found in it, but the smaller class of zoophytes are met with in considerable numbers. The islands in the lake, until lately, were barren and uninhabited; but the largest has been recently colonised, and settlements on the rest have been proposed. (Geog. Journal, x. 7.)

On the E. side of the lake is the village of Shishewan, the residence of a Persian prince, Melik Kasim Mirza, a brother of the late shah, who has adopted in every particular European habits and pursuits. He has built a palace in the European style, near which he has established mulberry gardens for the culture of silk, a farm yard, a glass work, a pottery, looms for weaving cotton, silk, and worsted goods, and various other kinds of manufactures. He has also built a vessel of 100 tons, which he employs in trading on the lake; on which, also, he contemplated the introduction of steam navigation. (See Rawlinson in Geog. Journ., x. 5-9.)

USHANT (Fr. *Ouessant*), the most W. of the islands off the coast of France, forming a portion of a group near the W. coast of Brittany, dép. Finistère, in lat. $48^{\circ} 28' 8''$ N., long. $5^{\circ} 3'$ W.; 26 m. WNW. Brest. Its area is 30 kilomètres in circumference, and it had a pop. of 2,391 in 1861. The island is difficult of access, but is tolerably fertile, affording pasture to a good many sheep and horses. It has a village, several hamlets, an old castle, and a small harbour frequented by fishing boats.

Sir Edward Hawke totally defeated a French fleet, under Admiral Conflans, off the coast of this island, in 1759. Owing to the violence of the weather, two of the British ships accidentally got ashore and were lost. At a later period, on the 27th July, 1778, an indecisive action took place off the island, between the English fleet under Admiral Keppel, who had been second in command in the former action, and that of the French under Count d'Orvilliers.

USK, a parl. and mun. bor., market town, and par. of England, hund. Usk, co. Monmouth, on the Usk, nearly in the centre of the co., 12 m., SW. Monmouth. The modern bor., which is more extensive than the ancient, has an area of 410 acres, with a pop., in 1861, of 1,545. The town is neatly, but irregularly built, the houses being mostly detached and interspersed with gardens and orchards. The church, which belonged to an ancient priory, appears to have been erected in the Norman period. It was originally cruciform, but has been very much altered; the square embattled tower, now at its E. end, seems to have been formerly in its centre; its interior contains little worth notice. Here, also, are chapels for Independents, Wesleyans, and R. Catholics. Over the market-place is the town-hall, a handsome building, erected at the expense of the Duke of Beaufort; attached to which is a lock-up house for the custody of prisoners till they can be conveyed to the co. gaol. The educational establishments comprise a free grammar school, founded and endowed in 1624, to which a writing school has since been attached; a national school for both sexes, supported by voluntary contributions; and almshouses for 24 inmates. Near to the latter are the remains of the ancient priory previously alluded to.

The earliest charter of the bor. dates from 1398,

this or any other charter. The local authority is vested in a portreeve, chosen annually; a recorder, 2 bailiffs, 4 constables, and an indefinite number of burgesses. It is associated with Newport and Monmouth in returning 1 mem. to the H. of C. Total electors for the three bors., 1,812 in 1865. Quarter sessions for the co. are held here, as well as a county court.

Usk is a place of remote antiquity, and appears to have formerly been of much more importance than at present. On an eminence adjoining the town are the extensive remains of its ancient castle, formerly one of the most considerable structures of its kind in the country. It came through the Mortimers, earls of March, into the possession of the crown, and was the favourite residence of Richard duke of York, nephew of Henry VI., whose sons, Edward IV. and Richard III., were born within its walls. At a subsequent period it belonged to the earls of Pembroke; and is now the property of the duke of Beaufort.

USKUP or SCOPIA (an. *Scopi*), a considerable town of European Turkey, prov. Macedonia, cap. sanjak, on the river of its own name, a tributary of the Vardar, 110 m. NW. Salonica. Its pop. is estimated at about 10,000. It has a good many handsome mosques and Greek churches; but its streets, though wide, are filthy in the extreme. It is the see of a Greek archbishop, and has some manufactures of leather. A Turkish garrison is stationed in its old dilapidated castle.

USTIUG (*Veliki*, or 'the Great'), a town of Russia, gov. Vologda, at the confluence of the Joug and Souchonia, tributaries of the Dwina, about 400 m. from the White Sea, and 550 m. E. by N. Petersburg. Pop. 8,359 in 1858. The town has numerous tallow, soap, candle, leather, and tile factories, with saw-mills, and some jewelry and silver works; but its trade is chiefly in corn, lard, linen, ship timber, and sail cloth. Its merchants trade with the Siberian towns generally, as far as Kiachta, and a large annual fair is held here on the 8th July.

UTAH, a central region of the U. States, erected into a territory in 1850, having N. Oregon, E. the crest of the Rocky Mountains, S. the parallel of the 37th deg. of N. lat., and W. California. Area, 109,600 sq. m.; estim. pop., exclusive of Indians, 88,193 in 1863. It is for the most part mountainous, but it also contains a considerable extent of forest and cultivable land, especially along the banks of the Colorado and its affluents. In many parts, however, it is still wholly unexplored. It includes the Great Salt Lake, on the E. side of which is a settlement of Mormons, or 'Latter Day Saints,' comprising almost the whole white inhabs. of the territory. The absurdity of their tenets occasioned their expulsion from the other parts of the Union, and the violent death, or, as it is called, martyrdom of their prophet, Joe Smith. Here, however, they found a secure asylum, and their numbers are rapidly increasing. The governor and secretary of Utah are appointed by the president of the United States for a term of four years, but their commissions are at any time revocable by the appointing power. The others are chosen under territorial authority. The legislative power of the territory is vested in a legislative assembly, composed of a council and a house of representatives. The council is composed of 13 members, elected by the people of the territory for two years; and the house is composed of 26 members, chosen in the same way for one year. The legislative assembly meets annually at Great Salt Lake City, on the second Monday in December.

general election is held on the first Monday in August annually.

UTICA, a town of the U. States, nearly in the centre of the state of New York, on sloping ground, gently rising from the Mohawk river, and on the line of the Erie canal, 82 m. NW. Albany, and 180 m. N. by W. New York. Pop. 22,530 in 1860. The town is regularly laid out; the streets, which generally cross each other at right angles, are, in some instances, shaded by rows of trees; and the houses are, for the most part, handsome and substantially built. The Erie canal, which intersects the town, is crossed within its limits by several bridges, and here unites with the Chenango canal, which opens a communication with the Susquehannah. Utica has above a dozen churches for different religious bodies, some of which are large and costly edifices. It has also a lyceum, and various superior public and private academies; a mechanics' association for the promotion of manufactures; a young man's association, with a library and reading room open to the public; an apprentices' library, a theatre, and numerous religious and charitable institutions. Its situation, at the junction of the Erie and Chenango canals, has made Utica the seat of an extensive and rapidly increasing commerce; and it has numerous banks, insurance companies, and other joint-stock associations. Its manufactures are also extensive and various; and it is in the centre of a district which is well supplied with water-power, and in which there are manufactories, with power-looms, for the weaving of cotton and other cloths, the spinning of cotton yarn, &c., with saw-mills, grist, and flour-mills.

In 1794, Utica was an inconsiderable village; and, so late as 1820, its pop. amounted to only 2,972: but the Erie canal having been opened in 1823, its subsequent increase has been astonishingly great. It was incorporated as a town in 1817, and as a city in 1832; and in the charter by which it was erected into a city, the licensing of shops and houses for the retailing of ardent spirits was expressly prohibited.

UTRECHT (an. *Ultra-Trajectum*), a city of Holland, cap. prov. of its own name, on the Old Rhine, by which it is divided into two parts, 20 m. S. by E. Amsterdam, with which it is connected by railway. Pop. 55,541 in 1861. Utrecht is oval-shaped, and is one of the best situated towns in the kingdom, being built on an undulating tract of land, more elevated than the surrounding territory, and having, in consequence, a drier and purer atmosphere. The country immediately around is finely wooded, and well-sprinkled with farm-houses and cottages. Fields of wheat and other grain are seen instead of unvarying green pastures; and the novel spectacle presents itself of rivers and canals flowing below the general level of the country, and not above it on the tops of mounds, as elsewhere in Holland. The approach to Utrecht, from Amsterdam, is very fine, being through a long avenue of lime trees, which forms a favourite public walk. The city was formerly defended by lofty brick walls; but these are now broken and dismantled, and the old ramparts have been converted into *boulevards*. Since the separation of Holland and Belgium, however, some outworks have been thrown up.

Utrecht has an antique appearance, many of the houses being built in the Gothic style: as in other Dutch towns, the material for building is mostly brick. The streets are more regular, the houses more modernised, and the squares more spacious, than in other towns of Holland. In some of the streets there are canals, or rather branches of the Rhine, for though they soon terminate in stagnant

canals, they have here some motion. The water is so far below the level of the thoroughfares, that the wharfs on its sides have doors opening to a kind of caverns under the streets, in which many of the poorer classes find habitations. The fine public walk called the Mall, on the E. side of the town, about 2,000 yards in length, is divided into alleys by rows of linden trees. The cathedral, formerly a fine edifice, has been so much dilapidated, that only the choir, transept, and tower remain: the last is wholly detached from the other parts, leaving room for a wide street on the place formerly occupied by the nave. It must have been originally larger than York Minster, but less elegant, being mostly constructed of brick. The transepts are shut up, and the only portion at present in use is the choir, fitted up in a plain manner for the Presbyterian service, though it has some fine monuments. The tower is a huge square structure, 388 ft. in height; and from its summit the view extends over a wide extent of country, comprising many cities, towns, and villages.

Utrecht has a celebrated university, founded in 1636 at the expense of the city, which ranks next to that of Leyden: it has 5 faculties and 19 professors, and is attended by about 600 students. The university buildings have no outward show, but they comprise a valuable library, a pretty good museum of natural history, and extensive collections in anatomy and pathology, especially one of beautifully-executed models in coloured wax. This city has also acquired distinction from the number and excellence of its superior schools. It has a tribunal of commerce, an academy, founded in 1778, which gives prizes for the best memoirs on scientific subjects, a branch of the Society of Public Good, and a mint, the machinery of which is partly wrought by air-pressure.

Utrecht, being in the centre of a populous agricultural district, is more bustling than the small Dutch cities in general. It has considerable manufactures of cloth and other woollen stuffs, velvets, linen fabrics, silk twists, fowling-pieces, and pins, with bleaching-grounds, sugar and salt refineries, brick and tile works. The famous act, called the Union of Utrecht, declaring the independence of the seven United Provinces, was signed here on the 29th of Jan. 1579; and the treaties of Utrecht, which terminated the war of the Spanish Succession and gave peace to Europe, were concluded here in 1713 and 1714. Among other distinguished individuals, Pope Adrian VI., the preceptor of Charles V., was a native of this city.

UTRERA (an. *Iliturge Vericulum*), a town of Spain, in Andalusia, prov. Seville, cap. distr. on the railway from Madrid to Cadiz, 14 m. SE. Seville. Pop. 12,441 in 1857. Utrera stands in the midst of a vast plain, that may be considered the first step from the marshes of the Guadalquivir towards the Ronda Mountains, 12 m. distant to the E. A slight mound, that rises in the centre of the town, and is embraced by an extensive circuit of dilapidated walls, doubtless offered the inducement to build a town here; and these walls, some parts of which are very lofty, and in a tolerably perfect state, appear to be Roman, though the castle and its immediate outworks are Moorish. The town is large, and not walled in; the streets are wide and clean, and a plentiful stream, remarkable as being the only running water within several miles, rises near, and traverses, the place. It has a spacious square, 2 par. churches (one of singular architecture), various convents and hospitals, a good town-hall, prison, and cavalry barracks; and near it is a convent, resorted to by a great concourse of devotees during a festival which lasts

eight days from the 8th of September. The bulls bred in the vicinity are the most ferocious of any in Andalusia, and a considerable trade is carried on here in cattle and horses; it has, also, some manufactures of hats, soap, starch, wax, and leather. In its vicinity are productive salt springs.

Utrera is an important military post, being at the divergence of several cross-roads. The French, when advancing upon Cadiz in 1810, made strenuous efforts to reach it before the Spanish troops under the Duke of Albuquerque; but, being anticipated by the latter, Cadiz was prevented from falling into their hands.

UTTOXETER, a market town and par. of England, co. Stafford, hund. Totmonslow, near the Dove, 17 m. SW. Derby, and 134 m. NW. London by Midland railway. Pop. 3,645 in 1861. The town stands on a hill sloping towards the river, and consists principally of three streets, diverging from the market-place in its centre. With the exception of the tower and lofty spire, which are ancient, the church has been rebuilt; the living, a rectory, is in the gift of the dean and canons of Windsor. Here also are several dissenting chapels. It has a free school for 14 boys, founded in 1588 by Mr. Thomas Allen, a native of the town, celebrated by Selden, Camden, and others for the extent of his mathematical and antiquarian learning; a national school supported by subscription; almshouses for 12 inmates; and a fund for the apprenticeship of poor children. Petty sessions are held weekly by the co. magistrates. The hardware manufacture is carried on to some extent, and there are numerous iron forges in the vicinity. Owing to the fertility of the surrounding country, especially the excellence of the pastures along the Dove, the market held here for agricultural produce, cattle and sheep, is one of the best in the county. Its trade is facilitated by the Caldon canal, which joins the Trent and Mersey canal, coming within a short distance of the town. Market-day, Wednesday. Fairs, ten times a year, chiefly for cattle, horses, and sheep.

UXBRIDGE, a market town and chapelry of England, par. of Hillingdon, co. Middlesex, hund. Elthorne, border of Buckinghamshire, on the Colne and Grand Junction canal, and on the railway from London to Oxford, 15 m. N. by W. the former. Pop. 3,815 in 1861. The town is situated on a slight eminence sloping to the river, and consists mostly of one long street, with a smaller one on the road branching off to Windsor. The main street is paved and lighted with gas;

and many of the modern houses are handsome and substantially built. The market-house, erected in 1789, is a brick building, 140 feet in length by 49 in width, supported on about 50 wooden columns. St. Margaret's chapel, built in 1447, is an irregular edifice of flint and brick in the Pointed style, with a low square tower: the Baptists, Friends, Independents, and Methodists have each places of worship. Two free schools, on the Lancastrian system, are supported partly by voluntary contributions, and partly by annual subscription from the manor funds and market tolls. A school of industry was founded in 1809, and there are several other charitable institutions for education and the relief of the poor.

Uxbridge has one of the largest country corn-markets in the kingdom. A great deal of flour is made at the flour-mills in the town and its immediate vicinity, and its millers and mealmen are in general as opulent as they are respectable. Large quantities of malt are also produced in the town, the trade of which is greatly facilitated by the Great Western railway and the Grand Junction canal. It has also an extensive manufactory of implements of husbandry. The municipal government is vested in the hands of two constables, four headboroughs, and other officers elected annually. Petty sessions for the town and several adjoining pars. are held every fortnight, and a court of requests for debts under 40s. once a month. The unsuccessful negotiation between Charles I. and the parliament in 1644, took place in an old brick building called the 'Treaty House,' which has been converted into an inn. Markets, Thursday and Saturday: fairs, four times a year.

UZES, a town of France, dép. Gard., cap. arrond., on the Auzon, 12 m. N. by E. Nîmes. Pop. 6,242 in 1861. The town is built on the declivity of a hill, at the foot of which rises the stream which was anciently conducted to Nîmes by the Pont du Gard. It is old, ill built, and ill laid out. It was a bishopric in the time of the Visigoths, and the old episcopal palace, and the former residence of the dukes of Uzès, are the principal edifices; the last is a huge castle, inclosed by high walls flanked with round towers, and bearing a good deal of resemblance to the Bastille in Paris, destroyed in 1789. Uzès suffered much in the religious wars, when its bishop, chapter, and most part of its inhabs., embraced Protestantism, and destroyed their cathedral. It has a court of primary jurisdiction, a communal college, and manufactures of silk, hosiery, coarse woollens and pasteboard.

V.

VAL-DE-PENAS, a town of Spain, in New Castile, prov. La Mancha, part. Ciudad-Real, in a tolerably fertile plain, 112 m. S. by E. Madrid, on the railway from Madrid to Seville. Pop. 10,768 in 1857. The town is well built, the mansion of the Marquis of Santa Cruz, and the warehouse of the royal tithes, being conspicuous among many other good edifices. The town is best known by the dry red wine produced in its neighbourhood, and hence called Val-de-Penas, which is in much request in Madrid, and approaches in quality to some of the stronger Bordeaux wines. The bread here is also of peculiar

to be dyed. It has a large fair on the 7th of August.

VALAIS (Germ. *Wallis*), a canton of Switzerland, in the SE. part of the confed., between lat. 45° 50' and 46° 40' N., and long. 7° and 8° 25' E.; having N. the Bernese Oberland, NE. Uri and Tessin, E. and S. Piedmont, and W. Savoy and the canton of Vaud. Area, 1,660 sq. m. Pop. 90,880 in 1860. This canton consists of the valley of the Upper Rhone, and may be described as 'an immense trough,' 70 m. in length, 1½ m. in depth and 2 m. wide at the bottom. The mountains on each side are among the highest in Europe; they

therefore be considered as the deepest in the known world. On the N. side are the Alps, to which belong the Finsteraarhorn, Jungfrau, Breitshorn, and other enormous peaks, while the S. boundary is formed by the great chain from Mount Blanc to St. Gothard, including the Cervin and M. Rosa. At the upper end of the valley these two ranges unite. Sixteen lateral valleys, some of considerable extent, open into the main valley of the Rhone; and where they join it, the width of the flat part of the valley is increased. Thirteen of these lateral valleys are inhabited. That part of the valley below Sion, formerly distinguished as the *Bas-Valais*, is a flat plain, swampy and unhealthy, where the heat of summer is intense, and millions of mosquitoes, with intermittent fevers, cutaneous diseases, and cretinism in its worst forms, abound. Above Sion, in the *Haut-Valais*, the marshes disappear, and fine pasturage and vineyards indicate a more favoured region. The *Valais* is remarkable as presenting within the smallest known area all the different climates and kinds of vegetable products met with between Italy and Iceland. At the foot of the Bernese Alps the vine succeeds remarkably well, and very good wine is produced, though in its management the inhabs. are both unskilful and slovenly. Indian figs, almonds, chestnuts, and pomegranates grow with little or no culture along the banks of the Rhone, and corn of all kinds is produced at different elevations. The cattle of the *Valais* are inferior to those of most of the other Swiss cantons; but the rearing of stock is the principal branch of rural industry, the surplus produce in cattle and cheese being exported chiefly across the Simplon into Lombardy. The pop. is much poorer than that of the Bernese Oberland, which is generally attributed to two causes: first, that the land belongs to a few great proprietors, and the peasantry, being merely tenants, feel but little interest in its improvement; and, next, the prevalence of the Rom. Cath. religion, with which there is usually found combined in Switzerland much ignorance and indolence. Iron, copper, lead, silver, cobalt, and small quantities of gold are met with, but mining industry is altogether neglected. Hempen-cloths, woollen yarn, and woollen cloths, with a few other articles, are made, but these are almost the only manufactures. Next to cattle breeding, the transport of goods across the Simplon is the principal occupation of the inhabs., for which purpose many mules are bred. The mineral waters of Brig and Louèche are of some advantage to the canton, being resorted to by many invalids.

This canton is divided into 13 districts, called *dizains*; Sion (Germ. *Sitten*), on the Rhone, a town of 2,500 inhabs., a bishop's see, is the cap. The supreme power is in a diet, composed of four deputies from each *dizain*, chosen for two years by the *dizain* councils, which are elected by all the citizens above the age of 18 years. The presidents of the *dizain* are mems. of the diet by virtue of office, and the bishop of Sion has a voice in the diet equivalent to four votes. The diet meets annually on the first Mondays in May and November. The executive power is in a state council of five mems., elected by the diet, and who are all re-eligible, except the *grand-bailli*, or president, who is eligible only after an interval of two years. Each commune has a court of primary jurisdiction, from which appeal lies to the district tribunals; the supreme court for the canton consists of 13 judges, nominated by the diet for two years, but always re-eligible. In respect of education, the *Valais* is behind most other parts of Switzerland. The public revenue, derived chiefly

from salt and transit duties, amounted to 685,468 francs in 1862, and the expenditure to 698,965 francs in the same year.

The inhabitants of the *Bas-Valais* are chiefly of French, and those of the *Haut-Valais*, of German descent. The *Valais* formed a part of the Burgundian, and afterwards the Frankish, dominions; it next became subject to its own count-bishops; but, in 1032, it was annexed to the Germanic empire. It was allied, not associated, with the cantons that formed the Swiss confed. in the 14th century. In 1798 it entered the confed. as a canton; but in 1802 was detached from it to form a separate republic under the protection of France. In 1810 it was incorporated with the French empire as the *dép.* of the Simplon, and in 1815 it again became a canton of the confed., in which it holds the 20th rank, contributing 1,280 men to its army, and 9,600 francs to its treasury.

VALDIVIA, a town and harbour of Chili, prov. of same name, of which it is the cap. The town, on the river Calacutta or Valdivia, about 16 m. from its mouth, is an insignificant assemblage of wooden huts, and was, for the most part, ruined by the earthquake of Nov. 7, 1837; but the harbour is probably the finest, as it is one of the most strongly fortified, in the Pacific. It is in lat. $39^{\circ} 53' 20''$ S., long. $77^{\circ} 33' 24''$ W., and consists of an estuary, formed by the Valdivia and several smaller rivers, entered by a narrow strait, the shores of which are lined by numerous batteries, mounting, in all, nearly 130 pieces of cannon. Ships of the line ride here in perfect safety; the depth of water, in the centre of the bay, being from 6 to 7 fathoms, and close to the shore 5 fathoms. During their struggle for independence, this valuable station was captured, with a very inferior Chilian force, by Lord Cochrane, on the 3rd of Feb., 1820.

VALENCE (an. *Julia Valentia*), a city of France, cap. of the *dép.* Drôme, on the Rhone, here crossed by a handsome suspension bridge, 59 m. S. Lyons, on the railway from Lyons to Marseilles. Pop. 18,711 in 1861. Valence lies pleasantly on the left bank of the river, surrounded by a fertile country, abounding in mulberry, almond, and other fruit trees. Opposite the town, a conical hill rises close to the Rhone, and about a mile beyond, a long range of vine-covered hills runs parallel with the river, producing the different species of St. Peray. The town is enclosed by an old wall flanked with towers, and entered by several gates. It is irregularly laid out, but is well built, and has latterly been much improved, both in its houses, a large proportion of which are of stone from the quarries of St. Peray, and in respect of cleanness. It has several public squares and promenades, as the Champ de Mars, planted with trees, the Places d'Orleans and aux Clercs. The cathedral or church of St. Apollinarius is a building in a degraded Roman style. It has a large square tower of four stories, and in the interior is the tomb of Pope Pius VI., who died at Valence, in 1799, with a bust of that pontiff by Canova, and some fine paintings by A. Caracci and other artists. Near this church is a private mausoleum, worth notice for its architecture. The barracks and citadel, the old residence of the governor, the court-house, prison, public library with 15,000 vols., and theatre, are among the principal buildings. Near the town is the polygon, a ground for the artillery-school practice.

Valence is a bishop's see, the seat of a court of primary jurisdiction, a communal college, ch. of manufactures, societies of agriculture, commerce, and arts. It has two seminaries, a school of design, several asylums, a convent, a Lutheran

church, ■ yard for building boats for the navigation of the river, manufactures of cotton goods, silk organzine, gloves, hosiery, leather, and earthenware, with marble works, lime and brick kilns, and sawing yards. It is a *dépôt* for the wines, silk, and other produce of the S. of France, and has six fairs a year. It was anciently the cap. of the Segalauni, and became a Roman colony under Vespasian, but it possesses no Roman antiquities. It formed successively part of the kingdoms of Burgundy and Arles, and of the dominions of the counts of Provence and Toulouse: it subsequently became the cap. of the Valentinois, and was governed by its own feudal nobles till ceded to Louis XI., in 1449. From the 4th to the 13th century eight church councils were held in Valencia.

VALENCIA, a kingdom or principal division of Spain, in the E. part of the peninsula, principally between the 38th and 41st. deg. of N. lat., and 0° 35' E. and 1° 35' W. long., consisting of a long and comparatively narrow strip of country, extending along the Mediterranean, which bounds it on its whole length on the E., and having inland from the N. round to the S. Catalonia, Aragon, New Castile, and Murcia. Area, 7,683 sq. m. Valencia is, upon the whole, one of the finest and most productive parts of the peninsula. A great proportion of the surface, particularly in the N. and W., is mountainous and rude; but the plain country, which stretches along the coast, and is watered by the Guadalaviar, Xucar, Mogra, and Segura is a kind of garden. All travellers coincide as to its extreme beauty, and superior cultivation, compared with the rest of Spain. Mr. Inglis, who travelled over many of the finest parts of Europe, says, 'The view of the plain is superb. Though not greener or more beautiful than the vale of Murcia, its immense extent and great populousness produce a more striking effect. The plain is probably little less than 80 m. long and 20 wide: on three sides it is bounded by the mountains, and on the 4th by the sea; and throughout the whole of this vast extent there is not an acre that does not produce its crop of grain, vegetables, or rice. The olive, mulberry, ilex, algarrob, orange tree, and palm, with all of which the plain is thickly dotted, give it the appearance of a union of garden and orchard; but the populousness of the plain is even more striking than its beauty and fertility. It forms altogether a prospect that, in richness and animation, cannot be equalled in any other country. The plain of Valencia produces every kind of crop congenial to the climate: two and three crops in the year are taken from it, and the greater part of the land returns 8 per cent. The rice crops are among the most valuable; they are chiefly produced in the territory of Albufera, surrounding the lake of the same name. This was the property first proposed to be granted to the Duke of Wellington, but the cortes of Valencia objected to it, and the estates near Granada were substituted. The rice grounds produce only one crop in the year, but the return is from 8 to 10 per cent. The rice is put into the ground in June, and cut in September; water is then let in upon the ground, and when the stubble rots, the land is ploughed up, and no other manure is required. In Valencia and its neighbourhood rice is in universal use by all classes, but the produce is much greater than the consumption of the plain, and the surplus is exported to the different ports of Andalusia. The whole produce is estimated at 12,000,000 arrobas, one-half of which at least is exported, and the average price may be taken at about 3s. the arroba, or nearly 1½d. per lb. The other chief product is the white mulberry, once

of Valencia. The produce of silk from the plain is now computed at about 1,000,000 lbs. a year; by far the greater part is exported in its raw state, at an average price of from 8s. to 10s. per lb. The export of fruit from Valencia is large, particularly of raisins; these are of two kinds, the muscatel and an inferior raisin; but neither is equal to the raisins of Malaga. The export of figs, oil, and wine from the prov. and different ports of Valencia is also considerable, particularly the latter, called *Beni Carlo*, exported from the town of the same name. This wine is sent chiefly to Cetto, from whence much of it finds its way, by the canal of Languedoc, to Bordeaux, to give body and colour to the clarets.' Barilla, sugar-cane, saffron, and aniseed are also grown.

But, despite the abundance of the prov., the peasantry, as is frequently the case in the most productive parts of Spain, appear to be in a very depressed condition. The *huerta* of Valencia belongs, for the most part, to great proprietors. The Duke of Medina Cœli has a revenue of 75,000 dollars a year from his estate there, and the families of Villa Hermosa and Benevento have almost as much; and, in fact, there are very few persons who cultivate their own land. And, though state taxes do not weigh down industry in this prov., the Valencians are subject to heavy feudal services and seignorial demands, levied in kind on the produce of the soil, amounting to 1-7th, 1-6th, and, in some places, 1-4th of the crop. No great number of cattle or horses are kept, and the sheep, though numerous, yield wool of only a mediocre quality. A good many tunnies are taken on some parts of the coast by a method similar to that practised in the Neapolitan dom. Mercury, copper, sulphur, arsenic, argentiferous lead, iron, and coal exist in many places, but are procured only in small quantities. Salt from springs, marble, and potters' clay are the principal mineral products. Manufactures are unimportant: woollen and linen fabrics are indeed made in most of the towns, and silk goods in Valencia and Gandia, but, at present at least, in very inconsiderable quantities. Cordage is made from the fibre of the *esparto* (*stipa tenacissima*), aloe, and *juncus*, and tiles, similar to the Delft manufacture, soap, glass, and paper are made in small quantities. An active internal traffic is kept up, the N. supplying the S. districts with timber, earthenware, linen and woollen stuffs, *esparto*, brandy, cattle; while the latter send to the former corn, fish, Levant produce, silk, and algarrobs; Valencia sends rice, silk, fruit, and fish to Aragon and Castile, for corn, wool, and cattle; and flax, hemp, silk, oil, rice, and soap to Murcia and Granada. Its foreign commerce is chiefly with Italy, England, France, Holland, and S. America, from which countries corn, salt fish, ship-timber, pitch, tar, iron, fine linens, and other manufactured goods are imported. Alicante, Valencia, Vinaroz, Murviedro, Benicarlos, and Guardamar are the principal ports. Very different opinions respecting the character of the pop. have been entertained by different travellers. Upon the whole, the Valencians would appear to be an airy, lively, active, but effeminate people, very different in manner from the Castilians; while their character forms apparently a still stronger contrast to the savage heroism of the Catalonians and Aragonese. Their dialect, though much akin to the Catalanian, is said to differ from it in retaining more of the Provençal.

This prov. was successively subject to the Carthaginians, Romans, and Visigoths, from whom it was taken by the Moors in 713. They held possession of it till 1238, when it was conquered by

wards formed a component part of the Spanish monarchy, but continued to preserve its representative body and its privileges, till the early part of the 18th century, when having, in the War of the Succession, taken part against the Bourbon dynasty, it was, on their establishment on the throne, deprived of its old constitution, and obliged to conform to the laws of Castile.

VALENCIA (an. *Valentia Edetanorum*), a city of Spain, cap. of the prov. of same name, on the Guadalaviar, about 4 m. from its mouth, and 188 m. ESE. Madrid, with which it is connected by railway. Pop. 87,073 in 1857. Valencia stands in a wide plain on the bank of the river which washes its walls, and separates it from its suburbs, with which it communicates by 5 bridges, of from 10 to 13 arches. The city is nearly circular, and about $2\frac{1}{2}$ m. round, enclosed by massive walls, with towers, and 4 gates. The old streets are crooked, narrow, unpaved, and frequently destitute of thoroughfare; but some new quarters have been laid out, with broad streets and squares, which are said to be well paved and well kept. Valencia is well lighted, and guarded by a patrol of watchmen, termed *serenos*. It is furnished with public sewers of great solidity, which some affirm were constructed by the Romans; and it has many private wells, though only one public fountain. Good quays faced with stone, and planted with trees, lined the river in the whole length of the city. A fine view is obtained from any one of the bridges; the line of irregular buildings following the curve of the river, and the bridges, one beyond another, with the great Moorish gates, give it an air of much grandeur. Few cities, even in Spain, formerly had so many religious edifices as Valencia: among these were reckoned no fewer than 27 convents for men and 22 for women, 16 churches, and 24 chapels and hermitages. The cathedral is of intermixed Greek and Gothic architecture, surmounted by a dome. It has numerous altars, a good deal of fine marble, some bas-reliefs, and paintings by some of the first Spanish masters. It is very rich in plate and relics. Some of the churches have domes, but the greater part tall, slender turrets, with all sorts of pilasters and whimsical devices. In the multitude of sacred edifices, some may be found that excel in particular parts, or strike by the richness of their decorations; but all are overloaded with ornaments. In most, however, are fine paintings by Juanes, Espinosa, Ribalta, Ramirez, Victoria, a pupil of Carlo Maratti, and many other artists, all natives of Valencia. The famous Supper of Ribalta is in the Corpus Christi College; and the same subject by Juanes, a work reckoned among the finest pictures of Valencia, is in the church of St. Nicholas, which also possesses sundry other fine pictures.

The exchange, custom-house, the temple, a palace built for a military order, by Charles III., the archbishop's palace, college of Pius V., and several noble residences, are worthy of notice; there are 5 hospitals, one of which is a large establishment for medical treatment of all kinds, several asylums, prisons, barracks, and a theatre. Valencia is one of those cities in which traces of Moorish dominion are the most visible; not in any splendid Alhambra or Alcazar, but in every day sights and common objects. Gateways are occasionally seen sculptured in marble upon Moorish designs; stones over the doors, or underneath the windows, show by their chiselled marks their ancient fashioners. All the Moorish tokens also distinguishing the pop. of Seville, Malaga, and San Felipe, are found in even greater distinctness in Valencia.

The university, founded in 1411, was formerly considered the best in Spain, particularly for the study of medicine. The professors, of whom there are about 70, are friars, except those who instruct in law: their salaries are from 50*l.* to 130*l.* a year. Lectures are delivered from Oct. 11 to May 31. Education in the university is nearly gratuitous, and many of the students are in the habit of receiving portions of the food distributed daily from the convents. The university library has not more than 15,000 vols., but its deficiencies are compensated by a good library in the archbishop's palace, with attached cabinets of antiques, and medals, open for 6 hours daily. There are 6 other colleges, and many inferior academies: the royal academy of Saint Charles, for the instruction of students in the fine arts, is the only institution in the city not under the superintendence of the priests.

The manufactures of velvets, taffetas, flowered damasks, and other silk stuffs, are said, at the end of last century, to have employed upwards of 3,000 looms; but if so, they have greatly declined in the interval. The existing manufactures comprise woollen fabrics, camlets, hats, table and other linen, gauzes, artificial flowers, leather, glass, paper, with the 'Valencia tiles,' used for the flooring of houses in all the cities of the S. of Spain. These tiles are at once cool, and highly ornamental; but they are far from cheap, those of the best quality being much more expensive than an equal extent of the most sumptuous carpeting. The port of Valencia is at Grao, about 2 m. distant. It is connected with the city by a broad planted avenue, forming the favourite public promenade around the city. The harbour is suitable only for boats, and the roadstead is exposed to the S. and SW. gales. The climate, though hot, is agreeable and healthy; and the city is a good deal resorted to by invalids. Society in Valencia appears to differ little from that in other S. Spanish towns. Many persons of rank and wealth reside here, but without any display. Travellers bear testimony to the agreeable vivacity, ready wit, freedom from affectation, and obliging disposition of the inhabs.

Valencia was held by the Moors from 1715; but taken from them, in 1094, by the celebrated Cid, Ruiz de Diaz de Bivar. After his death it was governed by his widow Ximene, under whom it sustained successfully one siege against the Moors of Cordova, but ultimately capitulated to them in 1101. It was retaken by James I. of Aragon in 1238, and peopled afterwards with Catalans and French settlers. It was taken by the French under Suchet, in 1812, and held by them till June, 1813.

VALENCIA (NUEVA), a city of Colombia, repub. Venezuela, prov. Carabobo, in a plain about 3 m. W. of the Lake of Valencia, and 18 m. S. by E. Puerto Cabello. Pop. estimated at 16,000. It covers a large extent of ground, most part of the houses having only a ground-floor. The streets are very broad, and the market-place is of great size. The entrance to the town from the N. is by a good bridge of three arches, built of stone and brick; near which is the *glorieta*, a large circular space where the inhabs. meet in the evening for dancing and festivity. Humboldt says, 'It is regretted, and perhaps justly, that Valencia has not become the capital of the country.' Its situation near Puerto Cabello, with which it is said to communicate by a good road, gives it many advantages, and it is a place of brisk traffic. But it has the great disadvantage of being infested with white ants, whose excavations underground at certain seasons become very dangerous to the buildings of the city.

The Lake of Valencia, or *Tacarigan*, is larger than the Lake of Neuchâtel in Switzerland, but in its general form it has a nearer resemblance to that of Geneva, which is about the same height above the sea. The opposite banks of the lake also offer a similar contrast. Those on the S. are desert and almost uninhabited, and a screen of high mountains gives them a gloomy and monotonous appearance; the N. shore, on the contrary, is cheerful, pastoral, and set off with sugar, coffee, and cotton plantations. There are numerous islands in this lake, the waters of which are gradually diminishing. Its mean depth is from 12 to 15 fathoms; where deepest, it is not more than 40 fathoms. It abounds with fish, and is used for the purposes of commerce; but it is a singular fact, that for more than two centuries none of its navigators ever thought of using a sail. An English traveller, of no very distant period, says that a native of Biscay, settled in Valencia, had then first tried the experiment, 'and the circumstance formed no small part of the conversation of those who were assembled at the pulperia of La Cabrera.'

VALENCIENNES (an. *Valentianæ*), a town of France, dép. du Nord, cap. arrond.; on the Scheldt, where it is joined by the Rhonelle, 28 m. SSE. Lille, on the railway from Paris to Brussels. Pop. 24,966 in 1861. Valenciennes is a secondary fortress, and has a citadel constructed by Vauban. It is tolerably well built, but ill laid out; a part of it was much damaged by the severe bombardment it received in 1793, the marks of which are still visible. The Scheldt intersects the town from N. to S., dividing it into two unequal parts. There are several public buildings. The town-hall, built in 1612, is of mixed architecture, highly decorated, and contains some fine apartments; the 2d story is appropriated to a picture gallery, in which are some works by Rubens. Attached to it is a belfry, constructed in the 13th century, 180 ft. in height. The lower part of a handsome theatre serves for a corn-hall. The general hospital, founded in 1751, is one of the largest establishments of its kind. The public library has 18,000 vols., and the museum of natural history is rich in collections. There are military and foundling hospitals, barracks, magazines, an arsenal, a college, and an academy of the fine arts founded in 1782. Besides Valenciennes lace, a good deal of fine cambric, cotton yarn, hosiery, and blankets, iron plate and nails, starch, saltpetre, linseed oil, chicory, earthenware, and toys are made in the town, which has also cotton-printing works, tanneries, distilleries, and salt refineries; and a considerable trade in wine, brandy, oil, soap, timber, and charcoal.

Valenciennes has sustained several sieges, the most memorable of which took place in 1793, when it was invested by an Anglo-Austrian army under the Duke of York, to whom it surrendered at the end of six weeks, during which the besiegers sustained great loss. It was retaken by the French from the Austrians in the ensuing year. Among the many distinguished natives of this town have been—Froissart, the historian of chivalry, Watteau, the painter, and D'Argenson, the minister.

VALERY (ST.), usually called St. Valery-en-Caux, a town and sea-port of France, dép. Seine-Inférieure, cap. cant.; on the British Channel, 33½ m. NW. by N. Rouen. Pop. 4,710 in 1861. Its port, enclosed between two cliffs, is small, and not fit for the accommodation of vessels of considerable burden. St. Valery has manufactures of soda and cotton thread, with some trade in the

tion of timber, dried fish, and corn. Many of its inhabs. are engaged in the cod, herring, and mackerel fisheries, and they enjoy the reputation of being good seamen. The country round is mostly in pasture.

St. Valery-sur-Somme is another sea-port town, on the N. coast of France, dép. Somme, 11 m. NW. Abbeville, on a branch line of the railway from Amiens to Boulogne. Pop. 3,456 in 1861. Its port is much larger than that belonging to the above town, and admits vessels of from 300 to 400 tons. It has large salt magazines, with manufactures of cordage and sail-cloth, and a brisk general traffic.

VALETTA (LA). See MALTA.

VALLADOLID (an *Pintia*), a city of Spain, cap. prov. and dep. of its own name, in Old Castile, on the Pisuega, where it is joined by its tributary, the Esqueva; 73 m. SW. Burgos, and 100 m. NW. Madrid, on the railway from Burgos to Madrid. Pop. 39,519 in 1857. The city stands in a plain bounded by limestone hills, and is surrounded by an old wall, which encloses a large extent of ground. It is full of edifices, which, during the reign of Philip III., who made it his constant residence, were the palaces of his great officers and nobility. Being abandoned by their owners, who followed the court in all its different emigrations, they are fallen to decay, and exhibit a picture of the utmost desolation. The private houses are ill-built and ugly. The great square, some streets built upon porticoes, and many colleges and convents, are still grand, and denote something of former magnificence; but, in general, Valladolid has the appearance of having been run up in a hurry to receive the court, and as if it had been meant to rebuild it afterwards, at leisure, of more durable materials than bad brick and mud, the composition of most of its present houses. Upon passing the first gate from the Madrid road, the traveller enters the *campo grande*, a spacious area surrounded by 17 convents, the scene of repeated *auto da fe*.

Valladolid has numerous churches, convents, chapels, colleges, hospitals, and asylums; though, except some of the religious buildings, none deserve much notice. The cathedral, an unfinished edifice, built by Juan de Herrera, at the expense of Philip II., was intended to have been one of the most sumptuous in Spain; but it is heavy and inelegant. The church and convent of St. Benito are handsome, but the church of St. Paul is most worth attention, from its general elegance, and the finish of its bas-reliefs and ornaments, which, after a lapse of 300 years, seem to have suffered little by their exposure to the weather. The royal chancery is a large and fine structure in the Tuscan order. The old palace, in which Philip II. and III. were born, is an utter ruin.

Valladolid has a university founded by Alonzo XI. in 1346: it was formerly distinguished for its school of jurisprudence, and continued to flourish till the end of last century; and it appears, even now, to be more frequented than Salamanca. Among the colleges of the city were one for the Scotch and one for the English, both of which were well endowed. The school of the fine arts is privileged as an academy, and has a superior collection of models in sculpture, architecture, and painting.

Valladolid was formerly an opulent commercial city, but its manufactures of woollen stuffs, hats, silk ribands, linen and cotton yarn, paper, liquore, perfumery, earthenware, and leather, are now little more than sufficient for the supply of the town: its trade, however, would most pro-

to the Douro, only 10 m. distant. The country round produces white wine, of good quality, madder, silk, and olives, and coal is said to abound in the neighbourhood.

Valladolid is the see of a bishop, under the archbishop of Burgos, the residence of a captain-general and military intendant. It was incorporated as a city, and made a bishop's see by Philip II., and was the residence of the court from his time till that of Philip IV., who removed to Madrid. Columbus, the discoverer of the New World, expired in this city on the 20th May, 1506.

VALLADOLID, or MECHOACAN, a city of Mexico, cap. intend. of same name, in a fine valley, 120 m. WNW. Mexico. Its pop., early in the present century, was estimated at 18,000, and is probably about the same at present. Mr. Ward says (Mexico, ii. 374), 'I know few places the approach to which (from the N.) is so tedious as that to Valladolid. For more than two hours you see the city apparently below you, while the road continues to wind among the surrounding hills. At length a rapid descent conducts you to the plain, where a long causeway, built across a marsh, forms the entrance to the town. The suburbs are poor and insignificant, but the high street is fine, and the cathedral, standing alone and open, has a very imposing effect. The view of the town from the Mexico side is beautiful: gardens and orchards form the foreground; while the lofty aqueduct, erected toward the end of the last century, the gorgeous churches, and a bold range of mountains behind, fill up the remaining space. Nearly all the public edifices, not immediately connected with the government, are due to the munificence of the bishops, most of whom have contributed to enrich or adorn the town. The cathedral, hospitals, and aqueduct are all the works of the church. The first is a magnificent building and wealthy, though despoiled of much of its treasures during the revolution.' Valladolid has a handsome public promenade; and its climate is temperate, as it stands nearly 6,400 ft. above the level of the sea. Iturbide, the short-lived emperor of Mexico, was a native of this city.

VALOGNES, a town of France. dép. Manche, cap. arrond., on the Merderet, 12 m. SE. Cherbourg, on the railway from Paris to Cherbourg. Pop. 5,812 in 1861. Valognes is a well built town, and has a handsome communal college and public library, with 15,000 printed volumes: manufactures, on a small scale, of earthenware, lace, gloves, and leather; and some trade in provisions and shell fish for the Paris market. The ancient Roman town *Alama* was situated in its vicinity. In the middle ages it had a strong castle, which, however, has been totally destroyed. Tourneur, the translator of Shakspeare, and the celebrated anatomist Vicq-d'Azyr, were natives of Valognes.

VALPARAISO, the principal sea-port town of Chili, prov. Santiago, on the Pacific, 60 m. NNW. Santiago. Pop. 75,000 in 1856. Valparaiso is inconvenient and ill-built, but its appearance from the sea is imposing, being built, somewhat like Hastings, at the foot of a precipitous range of hills. It consists chiefly of a straggling, long street, or rather terrace, for it is built only on one side, with some narrow and inconvenient thoroughfares leading out of it up the several ravines. In one of these is the plaza, a small triangular space, where the market is held; and near it are the principal church, the Dominican and Franciscan chapels. A little to the N. is the castle of Antonio, mounting about a dozen guns; and between

it and the plaza are a number of low buildings and sheds, termed the arsenal. In the N. quarter of the town, in a recess larger than the other ravines, is a collection of narrow lanes and mean houses; and many isolated dwellings are scattered about among the hills, the only access to which is by winding foot-paths. The suburb Almendral, on the sandy shore to the S., is more regularly laid out: the houses here, where there has been more room to build, consist mostly of a ground-floor only; but in the town of Valparaiso all have stories above the ground-floor. They are in general painted of lively colours. About the middle of the Almendral are the ruins of the church and convent of La Merced, which, like many other buildings in Valparaiso, was destroyed by the earthquake of 1822.

The bay of Valparaiso is open to the N., but sheltered by heights on all other sides; and the holding ground being mostly a stiff clay, offers a secure anchorage, except during N. gales. Opposite the custom-house, 100 yards from the shore, there are 5 fathoms water, which suddenly deepens to 10 and 20 fathoms; at the distance of 300 yards, and in the centre of the bay, are from 26 to 30 fathoms. The harbour is defended by the castle, and 2 forts at the N. end of the Almendral, and another fort inland. There is no mole, nor any facility for landing goods, except by launches, which are moored to the shore, and across which all packages are brought on men's shoulders; or by boats, which, however, can land in all weathers in the Fisherman's Bay, between the castle and Port St. Antonio. There are generally a considerable number of vessels in the bay, the greater part British and American; and Valparaiso continues to be the central depôt for the trade of Chili. Large quantities of corn are shipped here for Callao and Panama, especially the former. Wheat, tallow, hides, copper, the precious metals, indigo, wool, and sarsaparilla are among the principal exports. The market of Valparaiso is well supplied with meat, poultry, fish, bread, fruit and vegetables, at very moderate prices and of good quality; and its climate is generally agreeable.

VAN, a city and considerable lake of Asiatic Turkey, pach. of same name, the city being on the E. bank of the lake; 140 m. N. by E. Mosul, and 145 m. SE. Erzeroum. Pop. estimated at 50,000. The inhabs. consist of Turks, Kurds, and Armenians. The town is situated in a fine plain, covered with gardens, nearly 5,500 feet above the sea, at the SW. foot of an isolated rock, on which is its citadel. It is inclosed with double walls of mud and stone, having large round and small square bastions, and is farther defended, though not on all sides, by a ditch. The town has 2 large Armenian churches, 4 large mosques, several baths, and caravanserais. The great boast and dependence of Van is its gardens, which cover an extensive area between the city and the mountains. They comprise vineyards, orchards, melon-grounds, and fields. In summer the inhabs. of the town mostly reside in the gardens, the roads in which being lined with houses, the whole appears like an extensive village. Streams, bordered with willows, run through the main avenues. The castle on the NE. side of the town is built on a high and abrupt limestone rock, and, if the works were in proper repair and efficiently manned, would be all but impregnable. There are some very extensive excavations in this rock.

The trade of Van is inconsiderable. About 500 looms are employed in manufacturing coarse calicoes from cotton imported from Persia, mostly for home consumption, though some are sent to Bitlis to be dyed and exported. Almost the only

other articles of export from Van are fruits, wine, and grain, the produce of the surrounding gardens and fields. Every person of respectability has a house in town, with a country house, an orchard and vineyard, and perhaps a few fields.

Van is very ancient. The walls of the castle are in part Cyclopean, and many inscriptions in the cuneiform character have been discovered in the town and its environs. It is even affirmed that the castle was originally founded by Semiramis; but it is needless to say that there is no evidence by which to support this very improbable statement. Timour Bec, or Tamerlane, who took Van towards the close of the 14th century, is said, by the Persian writers, to have endeavoured, though ineffectually, to destroy its ancient monuments.

The Lake Van, the *Arsisa* of Ptolemy, is of a very irregular shape; greatest length, N.E. to S.W., 70 m.; greatest breadth about 28 m. Area estimated at 1,000 geogr. sq. m. (Geog. Journ., x.) It seldom freezes to any distance from the shore, except at its N.E. end, where, being shallow, in severe winters, it may be crossed on the ice. It has several islands, on one of which is an Armenian monastery. It is navigated by 5 or 6 crazy boats, which are sometimes employed to convey cotton cloths to Tadvan on their way to Bitlis, bringing back grain and timber. From the many wildfowl that frequent it, there is no doubt that fish abound in the lake; the fishery, however, occupies very few hands.

VANCOUVER'S ISLAND, a large island belonging to Great Britain, on the N.W. coast of N. America, being the most southerly of our possessions in that quarter. It stretches in a NNW. and SSE. direction, between the 48th and 51st degs. N. lat. and the 123rd and 129th degs. W. long., being about 300 m. in length, by from 40 to 50 m. in breadth. It is separated from the continent by what is in most parts a narrow channel, called on the S. the Straits of Fuca; in the middle, where it is the widest, the Gulf of Georgia; and, on the N., Queen Charlotte's Sound. The island was originally supposed to form part of the continent of North America, or New Albion, as it was then called. In April, 1792, Captain George Vancouver of the royal navy entered the Straits of Fuca, and, surveying and exploring as he proceeded, passed into the ocean by a passage considerably to the northward, and arrived at Nootka Sound in August of the same year, having thus circumnavigated the land, and determined its separate existence as an island. He named it the island of Quadra and Vancouver out of compliment to Señor Quadra, the Spanish commandant at Nootka. The former name has, however, fallen into desuetude, and the island is now generally known and recognised as Vancouver's Island.

The mountains are generally covered with pine, but rise, beyond the reach of vegetation, to the height of 16,000 feet. The soil is fertile and capable of successful cultivation. Coal, good in quality, has been found at many points, and has been worked to a considerable extent at Nanaimo on the east coast. The climate is beautiful, more especially from early summer to late autumn, or what is commonly called the Indian summer, somewhat resembling that of the south-west of England without the rain.

The capital of the island is Victoria, situated at its south-eastern extremity, a flourishing town of 7,000 inhabitants. The number of the aborigines has been estimated at about 17,000. Victoria is

The revenue of Vancouver's Island is raised by direct taxation, a tax of one per cent. upon the assessed value of real estate, and specific tax on certain professions and trades being imposed. The taxes levied in 1863 and their amounts were as follows:—

| | |
|-------------------------|--------|
| Real Estate Tax | £8,854 |
| Trade Licences | 3,687 |
| Liquor Licences | 4,914 |
| Harbour Dues | 3,563 |
| Postage Dues | 465 |

Total . . . 21,483

IMPORTS.

| | | | |
|------|----------|------|----------|
| 1860 | £548,108 | 1862 | £758,623 |
| 1861 | 414,215 | 1863 | 797,296 |

REVENUE AND EXPENDITURE.

| | | |
|------|---------|---------|
| 1862 | £24,026 | £28,592 |
| 1863 | 73,776 | 69,589 |

Till 1849, Vancouver's Island was only occasionally resorted to by the servants of the Hudson's Bay and Puget's Sound Companies; but in that year a lease of the island was granted to the former company for 10 years. The imperial government, however, reserved to itself the right of resuming it at the expiration of this period, on certain conditions. Accordingly, in 1859, it was made a British colony; Mr. Douglas, who had acted as governor under the Hudson's Bay Company, was confirmed in that appointment. The governor is assisted by an executive and a legislative council, nominated by the crown, and by an assembly of 15 members, elected by inhabitants possessed of a 12l. rental; or a freehold of 20l. acres of land, or of the value of 50l. In 1865 there were 1,051 registered electors in the island.

VAN DIEMEN'S LAND, or **TASMANIA**, an island and colonial settlement, belonging to Great Britain, in the S. Pacific and Eastern Oceans, off the S. extremity of Australia, from which it is separated by Bass's Straits; between lat. 41° 20' and 43° 40' S., and long. 144° 40' and 148° 20' E. It is shaped like a heart. Area estimated at 26,215 sq. m. Pop. 58,468 in 1861, being 33,700 males, and 24,768 females. In 1804, the total pop. numbered only 78, of whom 68 males and 10 females. The country is in general hilly or mountainous. The mountains rise to 3,500 or 4,000 ft., not forming continuous ranges, as in the adjacent continent, but generally isolated peaks. The surface consists alternately of elevated table lands and fertile valleys, most part of it being fit either for cultivation or pasturage. Several considerable rivers water the colony. The principal are the Derwent and Tamar, formed by the union of the N. and S. Esk, all which rise towards the centre of the island, in about lat. 42°; the first running to the S.E., and the rest northward. There are several large lakes in the interior, one of which is 60 m. in circ. The coasts are very much indented, and abound with excellent harbours. The climate is comparatively healthy, being apparently more congenial to European constitutions than that of Sydney. The winters are colder, but the country seldom suffers from those long-continued droughts which are the bane of New S. Wales, nor from too much rain. Sandstone, limestone, and basalt are among the principal geological rocks. Indications of coal have been met with, and iron ore has been dug up, some of which is said to yield as much as 80 per cent. of metal. Copper, lead, zinc, and manganese exist, but no mines have been hitherto wrought. The upper soil is usually sandy or argillaceous;

proportion of good soil than in Australia: fine tracts of land are found quite down to the borders of the sea, a circumstance unusual in the last-named continent: and extensive tracts, covered with luxuriant herbage, and free from timber or underwood, and which, consequently, require no clearing on the part of settlers previously to being ploughed, are met with in all parts of the interior. Timber, however, is by no means scarce. The Huon and Adventure Bay pines, and the black wood, are peculiar to the country; in most other respects the vegetable products, as well as the animals, are similar to those of Australia. A species of panther, which commits much havoc among the flocks, and kangaroos are found in great numbers: there is, however, no native dog. Poisonous reptiles are less numerous than in the adjacent continent. The aboriginal inhabitants, now almost extinct, appear to belong to the negro race of the E. Archipelago: they seem to be sunk in the lowest depths of barbarism; and are said to be ignorant even of the most useful and obvious arts, as fishing, and the construction of the rudest canoes. Their numbers have rapidly decreased since the establishment of the whites, and a few years since the greater part of those remaining in the colony were removed to Flinders' Island in Bass's Straits.

The settled portions of Van Diemen's Land stretch across the interior from the N. to the SE. coast along the courses of the Derwent, Tamar, and other rivers. All the W. and NE. parts of the island are not merely unsettled, but hardly even explored.

From the settlement of the colony down to the 31st December, 1862, the extent of land granted and sold to settlers amounted to 8,335,239 acres, 1,814,291 acres being at the same time held under depasturing licences. The plan of selling the unappropriated land by auction is now adopted in this colony, as in most others belonging to England. The following table shows the extent of land under the various kinds of crops, and the produce thereof, in the year 1862.

| Description of Crops | Land under Crops | Produce |
|--------------------------------------|------------------|-----------|
| | Acres | Bushels |
| Wheat | 60,826 | 1,008,569 |
| Barley | 9,470 | 199,310 |
| Oats | 31,153 | 737,633 |
| Peas | 1,912 | 24,354 |
| Beans | 375 | 7,964 |
| English Grasses for Seed . | 5,447 | 33,604 |
| | | Tons |
| Potatoes | 9,722 | 39,513 |
| Turnips | 1,084 | 6,237 |
| Carrots | 366 | 5,582 |
| Mangold Wurzel | 1,308 | 16,442 |
| Onions | 173 | 825 |
| | | Lbs. |
| Tobacco | 152 | 310,455 |
| | | Tons. |
| Colonial Hay | 35,257 | 54,506 |
| | | Bushels. |
| Tares | 321 | 4,098 |
| Total Acres in Cultivation | 253,050 | — |

Maize is not raised in the colony, the climate being too cold. Apples, currants, gooseberries, and similar fruit attain perfection, but the orange, citron, and pomegranate are not raised, and the grape and peach attain only an inferior degree of maturity.

In 1862, the stock of cattle was returned, in official reports, at 83,143 head; of horses, 20,742; of sheep, 1,661,225; of swine, 38,491; and of

goats, 2,356. The subjoined table gives the total value of the imports and exports, in each of the years 1860, 1861, and 1862.

| | 1860 | 1861 | 1862 |
|-------------------|-----------|---------|---------|
| | £ | £ | £ |
| Imports | 1,068,411 | 954,517 | 857,423 |
| Exports | 962,170 | 905,463 | 119,649 |

The great articles of export are wool, whale oil and whalebone, and bark. The imports comprise every description of manufactured goods, colonial products, wines, and farming utensils.

The constitution of Tasmania was settled by local act (18 Vict. No. 17); by this act a legislative council and house of assembly are constituted, called the 'Parliament of Van Diemen's Land.' The legislative council consists of 15 members, elected for 12 electoral districts. Every member of the legislative council holds his seat for 6 years from the day of his election, at the expiration of which time his seat shall be vacant. The competency of the council is not affected by vacancies, so long as 7 members remain. No judge of the supreme court can be a member of the legislative council; 28 Vict. cap. 43. The qualification of members is 30 years of age, and a natural born or naturalised subject. The qualification for electors is the possession of a freehold estate of 50*l.* annual value. The house of assembly consists of 30 elected members, and there are 24 electoral districts. Any natural born or naturalised subject can be elected, provided that he is not a judge of the supreme court or minister of religion. The duration of the assembly is five years.

The settled part of Van Diemen's Land is divided into 15 districts. Hobart Town, or Hobarton, the cap., is in the district of same name, on the Derwent, about 20 m. from its mouth. Pop. 19,449 in 1862. The town covers about one sq. m.; it stands upon the declivities of two gentle hills, and is intersected by a fine stream from the heights of the Table Mountain, which tower above the town on the W. to the height of 3,936 feet. The streets are wide, and intersect each other at right angles; and, having been from the first laid out on a uniform plan, it is built with much greater regularity than Sydney. Its houses are substantial, and 2 stories high; it has some good public buildings, including about 20 places of public worship, the new government house, in the Queen's Park, on the banks of the Derwent; and a quay, close to which vessels of the largest burden load and unload. Hobarton possesses one of the finest harbours in the world. The Derwent, which here forms a fine sheet of water, is navigable for ships for 3 m. above the town, and continues to afford a safe passage for vessels of 50 tons as far as New Norfolk, 20 m. higher up, where a ridge of rocks abruptly puts an end to the navigation. The suburbs of Hobarton are increasing and receiving much embellishment; villas are springing up in every direction. The principal settlement on the N. side of the colony is Launceston, on the Tamar, about 40 miles from its mouth, and 105 miles N. by W. Hobart Town, with a pop. of 10,359 in 1862. The river is navigable to it for vessels of 300 tons. The other towns are insignificant.

This island was originally discovered by the navigator Tasman in 1642, and subsequently received its name in honour of a governor of the Dutch E. Indies. It was afterwards visited and partially explored by Cook, Furneaux, and D'Entrecasteaux; but it was not ascertained to be an

island till Bass sailed through the straits which bear his name in 1798. The first English penal settlement was established here in 1803, and till 1813 it was a place for transportation from Great Britain and from New South Wales, of which colony it was a dependency. Transportation to New South Wales having ceased in the year 1841, Tasmania, to which had been annexed Norfolk Island, became the only colony to which criminals from Great Britain were sent; but this ceased in 1853, when transportation to Tasmania was abolished.

VANNES, a town and sea-port of France, *dép.* Morbihan, of which it is the cap., at the bottom of the Gulf of Morbihan; 63 m. WNW. Nantes, on the railway from Nantes to Brest. Pop. 14,564 in 1861. The town was formerly fortified, and entered by six gates, five of which, with some towers, still remain. It is clustered around its cathedral, and except one or two tolerable streets is irregularly and badly built. The cathedral, rebuilt in the 15th century, is a massive, but heavy edifice; in its interior, however, are some good monuments and paintings. It has another church and several chapels, one of which, attached to the communal college, is of good architecture. The prefecture is an ancient castle, and a convent has been converted into the residence of the bishop. There were formerly many monastic establishments at Vannes; but their buildings have now mostly received other destinations, and one is appropriated to the *Institution du Père Éternel*, which, besides boarding and educating 60 poor girls, has a great many out-scholars receiving primary instruction. The edifice, now the theatre, has served at different periods for the meetings of the states of Brittany and the parliament of Rennes. Vannes has 3 hospitals, a communal college, school of navigation, a polytechnic society, established in 1826, for the culture of the arts and sciences, a public library of 8,000 volumes, and manufactures of coarse cloths, linen and cotton yarn, and lace. Its port is small, and the entrance being shallow, it is fit only for vessels of small burden; on one of its sides is a planted promenade, and on the other are slips for building boats and small craft.

It has been supposed that Vannes occupies the site of *Dariorigum*, the cap. of the Veneti; but the better opinion seems to be that the latter was about 5 m. N. by W. Vannes, at Locmariaker, where the remains of a circus and Roman road are still extant.

VAR, ■ maritime *dép.* of France, *reg.* SE., between lat. 43° and 44° N., and long. 5° 40' and 7° 15' E.; having W. the *dép.* Bouches-du-Rhône, N. the Basses-Alpes, NE. the *dép.* of Alpes Maritimes, from which it is separated by the river Var, and E. and S. the Mediterranean. Area, 608,325 hectares. Pop. 315,526 in 1861. The surface, particularly in the N. and E., is mostly covered with ramifications of the Alps, consisting of primitive or calcareous formations covered with a gravelly and arid soil. The *dép.* is, however, well watered, and on the banks of some of the rivers, as the Var and Argens, are some very fertile tracts. The Var, whence the *dép.* derives its name, rises in the *dép.* of the Basses-Alpes, about 6 m. SE. Colmar, and, after running generally southward, falls into the Mediterranean at St. Laurent, 3½ m. SW. Nice, after a course of 68 m., for about half of which it is navigable for rafts. The Esteron and Vesoubia are its chief tributaries, no towns of much consideration are on its banks. Numerous lagoons and marshes border

arable lands are estimated to comprise 118,052 hectares; vineyards, 67,657 do.; woods, 230,700 do.; and wastes, about 187,800 do. Agriculture is very backward, and the supply of corn is inadequate for the consumption of half the pop.: the produce in wine, olives, and fruits of various kinds is, however, considerable. Capers, oranges, lemons, chesnuts, and perfumery are among the principal exports. Grasse is especially famous for its essences and liqueurs; and roses, jasmines, and other flowers are grown there and elsewhere in large quantities for their manufacture. The forests comprise many cork-trees, and bottle corks are made in several places. Kermes and a little tobacco are among the other products. Few horses or cattle, but a good many mules, are bred. Lead, coal, copper, iron, and manganese are met with, though very few mines are wrought. The tunny and anchovy fisheries are of considerable importance, and coral of good quality is fished up on the coast. Manufactures of no great consequence; but silk twist, perfumery, soap, paper, and leather are produced to some extent. The *dép.* is divided into 4 arrond.; chiefs towns, Draguignan, the cap., Toulon, Brignolles, and Grasse.

VARINAS, a town of Venezuela, cap. prov., on a tributary of the Apure, 300 m. SW. Caracas. Pop. estimated at 6,000. It is the principal mart for the excellent tobacco grown in its prov.; but has also a considerable trade in sugar, coffee, cotton, indigo, and cattle, which are mostly exported by way of the Apure and Orinoco.

VARNA, a fortified town and sea-port of European Turkey, prov. Bulgaria, on the Black Sea, at the mouth of the Pravadi, 47 m. E. Schumla; lat. 43° 12' N., long. 27° 54' E. Pop. estimated at 16,000. The fortifications have been considerably enlarged and strengthened since it was occupied by the Russians in 1829. Though the residence of a pacha, it is but indifferently built, and has only an open roadstead. The latter, however, being sheltered from NW. winds, which are the most to be feared in this sea, and having good holding ground, presents but little danger. Varna has always been a principal port for the shipment of wheat and other Bulgarian produce to Constantinople; and latterly her importance in this respect has been greatly increased, and she now supplies corn to all parts of the Levant; she, also, exports considerable quantities of tallow, with hides, cheese, dried beef, and wool. The imports consist principally of manufactured goods, especially cottons and cotton twist, colonial produce, spirits, and oil.

A great battle was fought near Varna on the 10th of Nov. 1444, between the Hungarians and their allies, under their king Ladislaus, assisted by the famous John Hunniades, and the Turks, under their sultan, Amurath II. The Christians, who had broken a truce which they had a short while before solemnly sworn to observe, suffered severely for their perfidy; their king having been killed in the battle, Hunniades taken prisoner, and their army totally defeated.

VASTO (an. *Histonium*). ■ town and sea-port of Southern Italy, prov. Chieti, on the Adriatic, 31 m. SE. Chieti. Pop. 11,455 in 1862. The town is walled, and has two collegiate churches, one of which is said to occupy the site of ■ temple of Ceres, several convents, and hospitals, with many good private buildings. Its inhabs. are mostly occupied in the manufacture of earthenware, in fishing, and the cultivation of olives and vines. On the 1st of April, 1816, this town was the theatre of an extraordinary catastrophe, by which it was partially destroyed by a sudden

been occasioned by the escape of subterranean water.

VAUCLUSE, a *dép.* of France, reg. SE., between lat. $43^{\circ} 40'$ and $44^{\circ} 25' N.$, and long. $4^{\circ} 40'$ and $5^{\circ} 45' E.$, having N. the *dép.* Drome, E. Basses-Alpes, S. Bouches-du-Rhone, from which it is separated by the Durance, and W. the Rhone, separating it from Gard. Area, 354,770 hectares. Pop. 268,255 in 1861. The general slope of this *dép.* is to the W., in which direction it is traversed by many small tributaries of the Rhone. Soil, mostly calcareous, but it is only in the neighbourhood of the larger rivers that it possesses much fertility. The arable lands are estimated to comprise 157,738 hectares; vineyards, 28,594 do.; woods, 62,141 do.; willow plantations, 2,717 do.; and heaths and wastes, 67,760 do. Agriculture, though still very backward, is said, of late years, to have made considerable progress. Oxen, horses, or mules are used indifferently for the plough, but the last are principally employed. The scarcity of other manure obliges the farmers to cut the wild box on the hills, which, being macerated and suffered to rot, is used for the purpose, and found peculiarly suitable for manuring vines. Wine and silk are among the most important products of the *dép.*: the produce of wine may be estimated at about 500,000 hectolitres, of which a considerable portion is exported. The best wines are those of Coteau-brulé, near Avignon, and of Châteauneuf, $4\frac{1}{2}$ leagues from Orange. Speaking generally, however, too little attention is paid to the culture and care of the vine. The produce of wheat is insufficient for home consumption, but a good deal of rye, and some maize, barley, buckwheat, and potatoes are grown, besides saffron, madder, and coriander and anise seeds. Almonds and other fruits, and essence of lavender, are among the exports. Artificial grasses are sown, but the pasture lands are not extensive, and the quantity of stock is less than in any other of the S. *déps.* Bees are numerous: the honey is of good quality; and about 60,000 kilog. of wax are exported annually. This *dép.* does not appear to be rich in metals; but building stone, of good quality, lime, and potters' clay, are plentiful. Silk fabrics are made at Avignon and Orange; and the town of Apt is famous, in the S. of France, for its earthenware and confectionery, as is Avignon for its printing establishments, and manufactures of printing types, bells, and other metallic goods. Copper, lead, and iron-plates, prepared madder, woollen stuffs, leather, paper, cordage, linen thread, glass wares, and tiles are made in this *dép.*, which has also many distilleries and dyeing-houses. Vaucluse is subdivided into 4 arronds.: chief towns, Avignon, the cap., Apt, Carpentras, and Orange.

VAUCLUSE, a famous fountain in the above *dép.*, close by the small village of the same name, 4 m. W. Isle, and 15 m. W. by N. Apt. This fountain has its source in a vast cavern at the foot of a rock 300 ft. in height, at the bottom of a narrow gorge in the mountains. Within this cavern is a deep basin of the purest water, the surface of which appears to be perfectly smooth and placid, but which, notwithstanding, emits so great a quantity of water as to give birth to the small river Sorgues, an affluent of the Rhone. After the melting of snows, or the occurrence of long-continued rains, the flow of water is greatly increased; but even in the driest season it is copious. In ordinary states of the fountain the water escapes by percolating through the rocks, stones, and gravel that form the outward side of the abyss, whereas during floods it overflows its banks. It is possible, taking

low, to its edge. Owing to its great depth it appears as if it were jet black, though, as already stated, it is limpid in the extreme.

This fountain is celebrated in the history of Petrarch. An old castle near the village, which belonged to his friend the Bishop of Cavaillon, was frequently visited by Petrarch, and is thence called his castle. The poet, however, lived in the village. He here frequently saw Laura, who is supposed to have been the wife of the Count de la Sade, the lord of the village. But this is doubtful, as well as the Platonism of her lover.

VAUD (Fr. *Pays de Vaud*, Germ. *Wuadt*), a canton of Switzerland, holding the 19th rank in the confederation, between lat. 46° and $47^{\circ} N.$, and long. 6° and $7^{\circ} 12' E.$, having N. the canton and lake of Neuchâtel, E. Fribourg and the Bernese Oberland, S. the Valais, Savoy, and the lake and territory of Geneva, and W. the *dép.* of Jura in France. Area 1,180 sq. m. Pop. 213,606 in 1861. Both the SE. and NW. extremities of this canton are mountainous; the former quarter is covered by ramifications of the Alps, one summit of which, the Diablerets, rises to 11,120 ft. above the level of the sea; the latter region is traversed by ranges of the Jura. The middle of the canton, between the Jura mountains and the lakes of Geneva and Neuchâtel, is a rich undulating country, and so celebrated for its agreeable character and picturesque beauty, that it has long been resorted to by visitors from many parts of Europe. The raising of corn and wine is the chief occupation of the pop. The vineyards, reckoned the best in Switzerland, are supposed to comprise about 13,000 acres, and to employ 20,000 vinedressers, independently of women and children. The wines of La Vaux and La Côte, both grown on the shores of Lake Lemán, are the best: the first is produced near Vevay, where the Romans, who erected a temple to Bacchus at Cully, are supposed to have originally planted the vine. A society of high antiquity in that town exercises a survey of the vineyards in the district, and celebrates a remarkable fête, attended by a great concourse of strangers, every 15th or 20th year. The number of cattle in Vaud has of late increased very much: it is supposed to have about 75,000 head of cattle, 23,500 horses, and 77,000 sheep: and the improvement in the breeds is said to have kept pace with the increase of numbers. Almost the only salt springs in Switzerland exist at Bex in this cant. They were discovered in the 16th, and bought by the government of Berne in the succeeding century. Marble, coal, crystal, sulphur, petroleum, and a few metallic products are met with, though not raised in any large quantities. Manufactures are very unimportant, and mostly confined to those of leather and yarn. The transit trade from France into Switzerland and Germany is of more consequence to the inhabs.

Vaud is subdivided into 19 districts and 60 circles; all the towns of more than 3,000 inhabs. forming a separate circle. Its constitution is more aristocratic than that of most of the other Swiss cantons.

The legislative power is vested in a grand council of 184 mems. elected for 5 years, which meets yearly in May at Lausanne. The electors include a certain portion of those among the citizens who are taxed to the highest amount, and must be neither domestic servants, recipients of public relief, bankrupt, or under penal condemnation. Each circle sends 1 deputy to the grand council, who must be an inhab. of the circle, 30 years of age, and possess property in the canton of the value of 2,500 fr., or some equivalent thereto.

dates are also nominated by each of the circles, and from among the general list the mems. already chosen elect 63 other mems. Finally, an electoral commission, composed of the mems. of the executive body, of the court of appeal, and 40 mems. of the legislative council, chooses the remaining mems., electing 36 from among the cantonal citizens, 40 years of age and possessors of landed property to the value of 10,000 fr., and 18 above 25 years of age without property qualification. The legislature chooses the executive council, which consists of 9 mems., and has the initiative in all propositions of laws and taxation. Each district has a court of primary jurisdiction, and each circle a justice of the peace. The inhabs. understand and speak French; but their common patois is a dialect somewhat similar to the Romansche. Schools are general, and it is estimated that 1 in 6 of the pop. was receiving public instruction.

This territory nearly corresponds to the *Pagus Urbigenus* of Caesar. It successively belonged to the Burgundian and Frankish kingdoms, the Germanic empire, and the dukes of Zähringen. From 1278 to 1586 it was possessed by Savoy; and by the gov. of Berne from the latter year till 1798, when it was erected into the canton of Lemman. It reassumed its present name in 1803. It furnishes 2,964 men to the army, and 59,273 fr. a year to the treasury of the Swiss confederacy.

VELEZ-MALAGA (an. *Menola*), a town of Spain, in Andalusia, prov. Malaga, cap. distr. on the Velez, near its mouth, and 14 m. ENE. Malaga. Pop. 12,523 in 1857. The town is slightly elevated above and on the left bank of the stream, and is commanded by the neighbouring hills. The streets are wide, clean, and well paved; but the thriving commerce and abundant market, naturally looked for in a place once so noted for the productiveness of its orchards and extent of its export trade, are no longer to be seen. Under the Moors, Velez was a place of considerable strength, and had a castle, now in ruins. It has two parish churches, six convents, several workhouses, a prison, public granary, and some fine public promenades. It is particularly well situated; its climate is not oppressively hot, the town being sheltered by the neighbouring heights; and its neighbourhood is very fertile, producing sugar, coffee, cotton, cochineal, large quantities of wine, silk, various fruits, and the sweet potato. It has some sugar mills, and manufactures of hats. It was taken from the Moors in 1487, the siege having been conducted by Ferdinand in person.

VELLETRI (an. *Velitrae*), a town of S. Italy, Comarca di Roma, near the Appian Way, 20 m. SE. Rome, on the railway from Rome to Naples. Pop. 10,250 in 1862. The town stands on a commanding eminence at the foot of Mount Artemisio, and enjoys an extensive view of the Pontine Marshes, as far as Monte Circello, and of the sea, with the range of the mountains of Norba, Cora, and Segni, and even those beyond Palestrina. It is surrounded by ruined walls, with decayed towers and ruinous curtains, and is but indifferently built. It has a town-hall by Bramante, and some fine palaces. The principal square has a fine fountain, and a bronze statue of Pope Clement VIII. The Borgian Museum, now in Naples, was originally established in the Borgian Palace, in this town. The inhabs. are mostly peasants, who work in the neighbouring fields and vineyards, and at night retire to the town, the air of which is extremely good.

Velitrae appears to have been one of the most considerable cities of the Volsci, and is said by

It was the residence of the Octavian family before they settled in Rome; and is celebrated as the birthplace of Augustus, who was born here on the 22nd Sept., anno 63 B. C., in the consulship of Cicero.

VELLORE, a town and fortress of British India, presid. Madras, distr. Arcot, 80 m. W. by S. Madras, on the Madras railway. The fortress, which is of considerable extent, comprises spacious barracks and the other necessary accommodations for a garrison, with various handsome buildings, round a square, on one side of which is a curious pagoda, now used as a magazine. The native town, which is large and populous, is situated to the S. of the fort, with which it is connected by additional battlements. In 1677 it was taken by Sevajee; and, during the war of 1782, was relieved by Sir Eyre Coote, in the face of Hyder's army. After the capture of Seringapatam, Tippoo's family was removed thither. In 1806 a formidable revolt of the native troops, followed by a massacre of the Europeans, took place here, of which Tippoo's family were supposed to have been the instigators. This occasioned the removal of the latter to Calcutta.

VENDEE (LA), a maritime dép. of France, reg. W., formerly included in the prov. of Poitou, and exclusive of the islands Dieu and Noirmoutiers, extending between the 46th and 47th degrees of N. lat., long. 0° 35' and 2° 10' W.; having N. Loire-Inférieure and Maine-et-Loire; E. Deux-Sèvres; S. Charente-Inférieure; and SW. and W. the Atlantic. Area, 670,849 hectares; pop. 395,695 in 1861. No portion of the surface is much elevated; the E. part of the dép. is undulating, though nowhere rising to the height of 500 ft. The principal rivers are the Sèvre-Nantaise and Niortaise, Antise, Vendée, Lay, Yon, and Vic. The Vendée rises in the dép. Deux-Sèvres, runs generally in a SW. direction, and joins the Sèvre-Niortaise, after a course of about 16 leagues, only a small portion of which is navigable. Fontenay is the only town of consequence on its banks. The dép. is subdivided into 3 districts; the marshes, the plain country, and the *bocage*. The marshes extend principally along the coast; the bocage, so called from the wood sprinkled over it, occupies the centre and upper parts of La Vendée; and the plain country, a great part of which is very fertile, comprises the rest of the surface. The arable lands are estimated to comprise 408,565 hectares; pastures, 109,896 do.; vineyards, 17,700 do.; and woods, 29,600 do. Agriculture is conducted in much the same way as in the adjacent dép. of Loire-Inférieure. Leases run from 3 to 7 years. In the plains, the ground is left idle the second year, as in Loire-Inférieure. The whole of this dép. is, with a very few exceptions, most miserably farmed. The farmers are without capital, and badly provided with implements, and have not half the number of labourers required for the land; the fields are always full of weeds, for the roots are left entire by the bad ploughs in use, and from the want of hands to pluck them out. A greater quantity of wheat, however, is grown than in any other of the W. déps.; and, next to it, barley is the grain principally cultivated. Flax and hemp are grown to a considerable extent in the marshy tracts. A large quantity of wine, principally white, but of a poor quality, is produced. Throughout a great part of the dép. estates are usually divided into farms of from 45 to 90 acres; and in the plain country few farms of this size have fewer than 60 or 80 sheep. The annual produce of wool is estimated at 600,000 kilogr. Oxen are sold from the plain to

stock. In some places mules are used for ploughing: they are brought from Deux-Sèvres when young, and, after having been worked lightly for 4 or five years, are sold to merchants for the Spanish market. A little lead and antimony, with some iron and coal, are obtained; but the *dép.* is not rich in mineral products. Pilchards are taken on the coast, and the inhabs. of Sables d'Olonne are interested in the Newfoundland fishery. Manufactures few, being principally of hats and woollen stuffs for home consumption. La Vendée is divided into 3 arronds.; chief towns, Bourbon Vendée, Fontenay, and Sables d'Olonne. This *dép.* is distinguished for the chivalrous and obstinate stand made by its inhabitants during the progress of the French revolution, in favour of the rights or pretensions of the Bourbons. In this they were a good deal assisted by the nature of the country; but their gallantry and their sacrifices were alike remarkable, and were worthy of a better cause.

VENDOME, a town of France, *dép.* Loire-et-Cher, cap. arrond., on the Loire; 20 m. NW. Blois, on the railway from Paris to Blois. Pop. 9,356 in 1861. The town is well built, clean, and handsome. The remains of an ancient castle, the communal college, cavalry barracks, theatre, and public library, are the objects most worthy notice. It has manufactures of kid gloves, cotton cloths, hosiery, yarn, paper, and leather.

VENEZUELA. See COLOMBIA.

VENICE (Ital. *Venezia*), a famous maritime city of Northern Italy, formerly the cap. of the republic of the same name, on a cluster of numerous small islands, in a shallow but extensive lagoon, in the NW. portion of the Adriatic; 75 m. W. by S. Trieste, on the railway from Trieste to Milan. Pop. 118,172 in 1863. The appearance of Venice, from whatever side it may be approached, is striking and singular in the extreme. Owing to the lowness of the islands on which she is built, she seems to float upon the sea,

—'from out the wave her structures rise,
As from the stroke of the enchanter's wand.'

Venice is divided into two principal portions of nearly equal size, by the Grand Canal (*Il Canale Maggiore*), a serpentine channel, varying from about 100 to 180 ft. in width, crossed by the principal bridge of the city, the celebrated *Rialto*. The various islands, which form the foundations of these two grand divisions, are connected by numerous bridges, which, being very steep, and intended only for foot passengers, are cut into steps on either side. The canals, or *rii*, crossed by these bridges, intersect every part of the town, and form the 'water-streets' of Venice; by far the greater part of the intercourse of the city being carried on by their means in gondolas or barges.

But, besides the canals, Venice is everywhere traversed by streets, or rather passages (*calle*), so very narrow as to be in general only 4, and seldom more than 5 or 6 ft. in width. The only exception is the *Merceria*, a street in the centre of the city, lined on each side with handsome shops; but even this, which may be regarded as the Regent Street of Venice, is only from 12 to 20 ft. across. To ride in a carriage, or on horseback, is here wholly out of the question. The streets, or lanes, are not paved with round stones, or blocks, but with flags, or marble slabs, having small sewers for carrying off the filth. Almost all the principal houses have on one side a canal, and on the other a lane, or *calle*. The former, however, is the grand thoroughfare; and gondolas, or canal-boats, are the universal substitute for carriages and horses. They are generally long, narrow, light vessels, and,

though rowed only by a single gondolier with one oar, cut their way through the water with extraordinary velocity. A sumptuary law of the old regime directed that the gondolas should all be painted black. In the middle is an apartment fitted with glass windows, blinds, and cushions for the accommodation of 4 persons. Some of the gondolas, belonging to private families, are magnificently fitted up.

In many parts there are small squares, or *campi*, in which are usually cisterns, for the careful preservation of rain water; but the only open space of any magnitude is the piazza of St. Mark, with the piazzetta leading to it, and forming the state entrance to Venice from the sea. 'The piazzetta,' says a traveller, 'is at right angles with the great square, branching off in a line with the church of St. Mark. On one side, and turning a side front to the port, is the old palace of the doges: on the other side are the *zecca*, or mint, and the library of St. Mark, the regular architecture and fresh and modern appearance of which seem to mock the fallen majesty of their antique neighbour. On the seashore, which forms the 4th side of the piazzetta, stand two magnificent granite columns, each of a single block; one crowned with the winged lion of St. Mark in bronze, and the other bearing the statue of St. Theodore. Between these two columns, in former times, public executions took place.' The piazza of St. Mark is an oblong area, about 800 ft. by 350, flagged over. Two of its sides consist of regular buildings, with deep arcades. Each side is itself uniform, though not similar to the other. On the N. is the Procuratorie Vecchie; on the S., the Procuratorie Nuove. The W. side was formerly occupied by the church of St. Geminiani; but this was taken down by the French, who erected in its stead the staircase of the new imperial palace. At the opposite end are the cathedral of St. Mark, the Orologio, and the Campanile; and in front of the cathedral are 8 tall poles, supported on handsome bases of bronzo, whence the flags of the Morea, Crete, and Cyprus were formerly displayed. From being the only piece of open ground in Venice of any consequence, this square is almost constantly thronged with company, and it is the scene of all the public masquerades and festivals that take place in the city.

Venice has a vast number of fine private palaces by Sansovino and Palladio; but many of its public buildings are more remarkable for gorgeousness and display than for purity and taste. They present generally a heterogeneous intermixture of Byzantine, or other Eastern, with Greek, Roman, and Gothic architecture. The celebrated church of St. Mark is not Gothic, Saracenic, or Roman, but a mixture of all those styles; neither a church nor a mosque, but something between the two; too low for grandeur, too heavy for beauty, no just proportion being preserved among the different parts. Yet it has the effect of grandeur, and a sort of beauty, from the richness of the materials, and the profusion of ornament. The original church was founded in 829, but the present edifice was founded in 977, under the direction of architects from Constantinople. The nave is 245 ft. in length, the transept 201 ft., the middle dome is internally 90 ft. in height, and the 4 other domes 80 ft. each. The front is 170 ft. in width, and 72 ft. in height, without its surmounting figures. In its lower part are 5 recessed doorways, each adorned with 2 stories of little columns, though these are mostly ill proportioned, and their capitals nearly all different. Over these arches is a gallery or balcony of

marble, in the centre of which are the famous bronze horses, most probably of Chian origin, and carried to Constantinople by Theodosius, whence they were conveyed away by the Venetians, when they took and plundered the capital of the Eastern empire, in 1206. For 18 years, or from 1797 to 1815, they crowned the triumphal arch in the Place du Carousal in Paris. Immediately behind the horses is a large circular window, on either side of which an arched doorway opens upon the balcony. The front terminates in pointed arches, surmounted by a crowd of spires, pinnacles, statues, and crosses. The finishings are in the style of the Italian Gothic of the 15th century, but overcharged and heavy. The vaulting and great part of the walls are covered with mosaics, and the rest with rich marbles. The columns of porphyry and verd-antique; the pavement of minute pieces of white and coloured marbles, jasper, agate, lapis lazuli, variously, and for the most part, beautifully disposed; the inlaid ornaments, and gilded capitals, produce a picture grand as it is magnificent. The orologio, or clock-tower, on the N. side of the cathedral, has little to recommend it; and the campanile is merely a large square tower upwards of 300 ft. in height, terminated by a pyramid. In it Galileo made many of his astronomical observations. The *loggia* around its base, now converted into a lottery-office, is a beautiful building of the Corinthian order, from the designs of Sansovino. The Procuratorie Nuove, now the royal palace, is a rich line of building, fronted with all the different Greek orders.

The ducal palace was originally founded in the 9th century, but the present edifice dates only from the middle of the 14th, when it was erected by the doge Marino Faliero. Externally, it presents a double range of arches, supporting a great wall of brickwork, pierced with a few windows. The corners are cut to admit thin spiral columns. Notwithstanding its many defects, this structure derives an imposing effect from its grandeur of dimensions and unity of design. The palace is entered by 8 gates, the principal leading into the *cortile*, which is surrounded on 3 sides by 2 stories of arcades. One side is richly ornamented, though the whole be in bad taste. A noble flight of steps, called, from the colossal statues of Mars and Neptune, by Sansovino, the Giants' Staircase, leads up from the *cortile* to the open arcade, where, under the Republic, the lions' mouths gaped to receive communications or surmises of plots against the state. From this exterior corridor the state apartments are entered. The walls of the Sala di Quattro Porte are covered with paintings by Tintoretto, Vicentino, and Titian. The hall of the Great Council, Sala del Gran Consiglio, 153 ft. in length, is now principally appropriated to the library, of which Petrarch was one of the founders; but it is also rich in frescoes, by Bassano, and contains a fine collection of ancient sculpture, and the portraits of the Venetian doges. The Sala dei Pregadi, and numerous other apartments, are richly gilt, and exhibit all the glories of the Venetian school of painting. In the hall of the Council of Ten, converted by Napoleon I. into the chamber of a court of cassation, the ceilings have been painted by Paul Veronese; and on every side the eye rests on pictorial representations of the achievements and glories of the republic. In the lower parts of the palace are the former tribunals and dungeons of the state inquisition, from which a passage leads across the Ponte de' Sospiri, or Bridge of Sighs, to a door now walled up, but which formerly opened into a chamber where prisoners were despatched.

St. Mark's, those bordering the harbour and the canal of Giudecca are the finest, including the Dogana or custom-house, the church of La Salute, and those of San Giorgio and Il Redemptore, both designed by Palladio. These last were on the point of being pulled down by the French, and only saved by being redeemed for a large sum of money. The Redemptore is admirable both in plan and elevation, and its interior is almost perfect in its proportions, simple, grand, and harmonious. It is one of Palladio's chef d'œuvres, and is perhaps the finest church in Italy, though inferior to a great many in costliness and magnitude. Besides a Greek church and 7 synagogues, Venice has altogether about 100 Rom. Cath. churches, which are, on the whole, among its best buildings. There were formerly many more; but the French pulled them down, with a number of convents, in pursuance of their plans for the improvement of the city. Several of the churches date from the middle ages, though few of them are worth especial notice. One, however, is interesting, from its containing the remains of one of the greatest painters and of one of the greatest sculptors that Italy has produced—Titian and Canova: the grave of the former is marked by a short inscription on a plain stone let into the pavement. Canova has a fine pyramidal monument, from one of his own designs, the expense of which was defrayed by contributions collected in all parts of Europe. The famous painter, Paul Veronese, is buried in the church of St. Sebastian, where he has a monument. The belfries of all the churches are detached, and appear to be built on the model of St. Mark's.

The general cemetery or burying-place for the city is on the island of San Cristoforo di Murano. Here, rich and poor, the noble and the beggar, are all interred, the expenses of the burial of the latter being defrayed by government. This cemetery was formed, and the plan of conveying all dead bodies to it from the city enforced, by the French; and it has since been continued. A gondola, moored to the island, is appropriated to the transmission of corpses. The Jews have their burying-ground at Malomocco.

For a lengthened period after the foundation of the city, the communication between its E. and W. divisions, across the grand canal, was effected by ferry-boats. A wooden bridge was subsequently established; and this having fallen to decay, it was determined to replace it by one of marble from the designs of Antonio da Ponte. The building of the Rialto was commenced in 1588; but, though it consists of a fine elliptic arch, neither its beauty nor its magnitude correspond with its fame and the attention it has excited. Its arch is 89 ft. in span. The roadway of the bridge is divided into three parts, viz. a narrow street in the middle, with shops on each side, and two still narrower streets between the shops and the balustrades. The shops disfigure the bridge, and make it look heavy. It is lofty in the middle, and is ascended, like the other bridges, by long flights of steps at either end. The view from the summit, along the grand canal, frequently presents a very animated scene, and is one of the finest in Venice.

The palaces of Venice, built, like those of Amsterdam, on piles, are massive structures; but, except such as have been built by Palladio, Sansovino, Sannicchiele, Longhena, Scamozzi, and a few other architects of eminence, they are mostly deficient in good taste. They in general exhibit too many orders in front. Venice, in truth, is more attractive from its singularities than its

teresting to the student of architecture, who may here, in the words of an architect, 'trace the gradation from the solid masses and round arches, the only remains of the ancient grand style in the 6th, 7th, 8th, and 9th centuries, through the fanciful forms and grotesque embellishments of the middle ages, to its revival and re-establishment in later times.' Many, however, of the old patrician mansions are deserted, and not a few of them have been pulled down. Necessity too has, in many instances, obliged their owners to part with the fine works of art, with which they were formerly embellished. Still, however, some of the palaces have yet to boast of good collections of pictures and statues. The Manfrini Palace has a splendid gallery of pictures; and the Palazzo Barberigo has some fine works by Titian. The Grimani Palace contains the only extant statue of Marcus Agrippa, and a fine bust of Caracalla; and in the Pisani Palace is Dædalus fixing wings on his son, the first group executed by Canova. But, notwithstanding their magnitude and imposing external appearance, the rooms inhabited by the family, in the greater number of the palaces which are still occupied, are often small, ill furnished, and uncomfortable. Personal accommodation and the enjoyment of good air have been sacrificed that space might be found for the exhibition of statues, pictures, and other works of art. All the larger houses, or palazzi, are from three to four stories in height, being generally of a square form, with an inside court containing a cistern, in which the rain-water is carefully collected. As already stated, they have, for the most part, two entrances—the principal opening on a canal, and the other on a street or alley. Some of the finest palaces are built wholly of marble. The grand canal has on each side many such buildings.

The houses occupied by the middle and lower classes are built of brick, and are in general covered with wood. Few of them have arcades, but they are mostly provided with balconies. From the extreme narrowness of the streets, the houses are usually gloomy, and are miserably deficient in the appropriate distribution of their different parts, and in all those conveniences and adaptation to comfort that distinguish houses in this country.

The arsenal, which opens upon the port not far from St. Mark's, together with the dockyard, occupies an island between two and three m. in circuit, and is defended by lofty turreted walls. The entrance is guarded by two towers flanking a gateway, over which the winged lion still frowns defiance; and in front of this entrance are four lions, brought from the Piræus, two being of very fine proportions, and probably of Pentelic marble. The magazines and docks are kept in good order, and ship-building is one of the chief branches of industry at Venice. Besides the armoury, magazines, forges, foundries, and other necessary establishments, here is a rope house, 1,000 ft. in length. One of the walls of the armoury has a statue of Pisani, famous for his contest with the Genoese, and a beautiful monument by Canova, representing Fame crowning the Venetian admiral, Angelo Emo.

During the times of the republic, the Bucentaur was the great lion of the arsenal. This was the state barge, in which the doge, accompanied by a splendid cortège, proceeded to espouse the Adriatic. The ceremony was performed by the doge dropping a ring into the sea, pronouncing at the same time the words, '*Desponsamus te, Mare, in signum veri perpetuæ dominii.*' In these days, however,

'The spouseless Adriatic mourns her lord,
And annual marriage now no more renewed.'

Byron adds that the Bucentaur 'lies rotting, un-restored;' but, in fact, she was burned by the French soon after the downfall of the republic.

Venice has 6 theatres, the largest of which may contain 2,500 spectators: the Venetian drama is, however, in a very low state. The Dogana, the old exchange, is a fantastic edifice of the 17th century; and the new prison, built by Antonio da Ponte in 1589, is much too handsome for its purpose, being an elegant Doric edifice. The bishop's palace and seminary, the various hospitals and barracks, are among the other principal edifices. A flourishing academy of the fine arts, 4 schools of music, and a public school for each corporation of tradesmen, are among the principal institutions for education. 'Venice,' says a celebrated German traveller, Herr von Raumer, 'holds a prominent place in Italy for its charitable institutions. There is one house within the city in which 700 poor people are lodged, and many more have free lodgings and receive pecuniary assistance out of the establishment. There is an orphan house for about 335 children; an infirmary for 86 women; a wealthy institution for the reception of penitent women; a hospital, capable of receiving 1,000 patients; a house of education for 90 young girls; a foundling hospital, &c.; and the yearly revenues, chiefly arising from endowments, amount to about 580,000 florins.'

Venice has been represented as a delightful residence; but though it may be, and perhaps is, an aquatic paradise to the amphibious bipeds born within the sound of St. Mark's bells, it is very different to a stranger. At first, no doubt, it surprises and gratifies by its novelty; but it soon becomes tiresome from its sameness, the incessant recourse to boats, the narrowness of the streets, the want of room, the absence of all rural beauty, and the constant sense of imprisonment. It would not, in fact, be habitable were the water fresh; but the saltness of the water, and the flux and reflux of the tide, make it tolerably salubrious. The latter phenomena, however, which are at all times much less sensible in the Mediterranean than on the British shores, are in summer so inconsiderable, that the canals become stagnant, offensive, and unhealthy. The characteristics of the climate are, a summer much hotter than in England, accompanied with occasional visits of the *sirocco*; a winter, not of great length, but sharp, particularly during the prevalence of the NW. wind, which blows across the interior of Switzerland and the Alps. Rains are frequent, particularly in spring; and there being no springs or wells, the inhabitants, as already stated, supply themselves with water collected in cisterns, from the tops of the houses.

It should, however, be observed, that the Venetians are no longer wholly without trees and flowers; very extensive gardens, with a fine street leading to them, were constructed by the French, and are a noble monument of their taste and munificence. 'These gardens,' says an English traveller, 'excite interest from the mode in which they were formed, more than from their beauty: not that they are deficient in taste or variety. They were formed with immense labour by the introduction of artificial earth, brought at an immense expense from *terra firma*, and no expense was spared in their completion. There are several serpentine walks over mounts, many trees and shrubs thriving very fast; and all this, with the different views of the lagoon, the many islands interspersed, and Venice, make this promenade both agreeable and interesting. The gardens are

nearly ■ m. round, and are connected by a handsome bridge.'

The islands on which Venice is built lie within a line of long, low, narrow islands, running N. and S., and enclosing what is termed the lagoon or shallows, that surround the city, and separate it from the main land. The principal entrance from the sea to the lagoon is at Malamocco, about $1\frac{1}{2}$ league S. from the city; but there are other, though less frequented, entrances, both to the S. and the N. of the latter. There is a bar outside Malamocco, on which there are not more than 10 ft. at high water at spring tides; but there is a channel between the western point of the bar and the village of San Pietro, which has 16 ft. water at springs, and 14 at neaps. Merchant vessels usually moor off the ducal palace; but sometimes they come into the grand canal which intersects the city, and sometimes they moor in the wider channel of the Giudecca. Vessels coming from the S. for the most part make Pirano or Rovigno on the coast of Istria, where they take on board pilots, who carry them to the bar opposite to Malamocco. On arriving at the bar, ships are conducted across it and into port by pilots, whose duty it is to meet them outside, or on the bar, and of whose services they must avail themselves.

The chain of low narrow islands which bounds the lagoon on the side next the sea, being, in part, broken, the republic constructed, during last century, a mole several miles in length, to fill up the gaps in question, and protect the city and port from the storms and swell of the Adriatic. This vast work, formed of blocks of Istrian stone resembling marble, connects various little islands and towns, and is admirable alike for its magnitude, solidity, and utility. It bears the following inscription:—

'Ut sacra astuaria, urbis et libertatis sedes, perpetuum conserventur, colosseas moles ex solido marmore contra mare posuere curatores aquarum, anno salutis, 1751: ab urbe condita, 1330.'

The *Old Bank of Venice* was founded so far back as 1171, being the most ancient establishment of the kind in Europe. It was a bank of deposit; and such was the estimation in which it was held, that its paper continued to bear an agio as compared with coin down to 1797, when the bank fell with the government by which it had been guaranteed. At present there are no corporate banking establishments in the city, and no bank notes are in circulation. There are, however, several private banking houses, which buy, sell, and discount bills, and make advances on land and other securities. They are under no legal regulations of any sort, except formally declaring the amount of their capital to the authorities when they commence business. The legal and usual rate of interest and discount is 6 per cent. It is not the practice to allow interest on deposits. Bills on London are usually drawn at 3 months, and on Trieste at 1 month.

Morals and Manners.—Most travellers have been accustomed to represent Venice as distinguished by a peculiar profligacy of morals. It may be doubted, however, whether she be entitled to any peculiar pre-eminence in this respect over most of the other great cities of Italy; and the loss of her commerce and of that wealth which the expenditure of government brought into the city, has reduced alike the means of, and incentives to, corruption. It is now generally acknowledged that the impressions made on foreigners during the carnival season were in a great degree exagger-

the licence of the period, and the universal use of masks, allowed even the most scrupulous persons to indulge in without any violation of propriety. Undoubtedly, however, the conduct of the government, the nature of her religion, and the vast wealth that formerly centred in Venice, all tended to corrupt the morals of the people and to immerse them in sensual pleasures. We hardly think it was ever, as Addison has stated, a part of the policy of government 'to encourage idleness and luxury in the nobility, to cherish ignorance and licentiousness in the clergy, to keep alive a continual faction in the common people, to connive at the viciousness and debauchery of convents, to breed dissensions among the nobles of the terra firma, and to treat a brave man with scorn and infamy.' (*Travels*, art. 'Venice.') But, whether intended or not, this, no doubt, was the effect of their jealous despotism, which, by its intolerance of all that was truly great, generous, and noble, shut up, in as far as possible, all the avenues to distinction in politics, literature, and even war, leaving little, save intrigue and licentiousness, to occupy the public mind. But, as already stated, society in Venice, has been materially changed since the revolution of 1797. Lord Byron says, that 'of the *gentiluomo Veneto*, the name is still known, and that is all. He is but the shadow of his former self, but he is polite and kind. It may surely be pardoned to him if he is querulous.' But, notwithstanding the changes to which they have been subjected, and which have reduced them from haughty lords, but 'one degree below kings,' to abject subjects, the Venetians are now, as of old, most agreeable companions, and the Paphian Queen still holds her court in the sea-girt city.

'In Venice Tasso's echoes are no more,
And silent rows the songless gondolier;
Her palaces are crumbling to the shore,
And music meets not always now the ear:
Those days are gone—but Beauty still is here.
States fall—arts fade—but Nature doth not die;
Nor yet forget how Venice once was dear,
The pleasant place of all festivity,
The revel of the earth, the masque of Italy!'

Foreigners, especially, are extremely well received, and society is on a very easy footing in Venice. Owing to the facility with which the city is supplied with provisions from the plains of Lombardy and elsewhere, by means of the railway, and the lowness of rents, living is here unusually cheap; and were it not for its disadvantages in other respects, it would be a very desirable residence.

Historical Notice.—The ancient government of Venice was one of the most singular that has ever existed. In her earlier period she appears to have been governed by doges, or princes, who were elected by the popular voice; but who, on being elected, became the absolute rulers of the state. The doge enjoyed, however, only a precarious dignity; for, in the event of any disaster occurring to the arms of the republic, or of his becoming unpopular, he was not unfrequently deposed, and sometimes assassinated. To obviate the disorders that grew out of this state of things, it was resolved, in the 12th century, that each of the six districts into which the city was then divided should nominate 2 individuals as electors, and that the 12 electors so chosen should nominate a grand council of 470 individuals which should represent the public, the general assemblies of which were henceforth discontinued. A senate was at the same time created, and 6 councillors were appointed to assist in the government.

lessened by the establishment of the grand council, which included all the most distinguished citizens, it was still very considerable; and on several occasions the people endeavoured by violence to recover the power they had lost. In this, however, they were wholly unsuccessful; and at length, after various struggles, it was resolved, in 1319, that the grand council should no longer be elected, but that the dignity should be hereditary in its members. The aristocracy was thus established on a solid foundation; but no sooner had this been done than the dignified families became jealous of each other; and to avert the chance of any individual acquiring a preponderating influence in the state, a carefully devised scheme of indirect election to all the higher offices was established, at the same time that the nobles subjected themselves, the doge, and every one else, to a system of despotism, which not only determined the public and private conduct, but, in some measure, even the very thoughts of individuals. This was accomplished, partly by the institution of the Council of Ten, a committee chosen from the Grand Council, to which all the powers of the state were entrusted, and partly by the institution, in 1454, of three State Inquisitors, selected from the Council of Ten, and invested with all but unlimited authority. The proceedings of this most formidable tribunal were shrouded in the most impenetrable secrecy; but it was believed at the time, and is now certain, that it did not wait for overt acts, but proceeded on suspicion and presumption; that it had secret prisons; and that it made free use of the agency of spies, torture, and even of assassins. An individual disappeared, by what means no one knew; but if it were supposed that he had fallen a victim to the fears or suspicions of the inquisitors, his relatives prudently abstained from all complaint, and even from making any inquiries respecting him. An unguarded expression, if reported, as was frequently the case, to the inquisitors, was sure to draw their attention to the offender, so that not merely the freedom of the press, but even of speech, at least on political matters, was completely annihilated. Although, however, this jealous tyranny did not fail to repress, or rather extinguish some of the nobler energies of the mind, it must be admitted that it preserved, for a lengthened period, the peace of the republic. It is true, also, that its despotism pressed equally on all classes and all individuals; the doge was as liable, and as likely, if occasion required, to be called to account by the inquisitors as the humblest gondolier.

Venice was the earliest, and, for a lengthened period, the most considerable, commercial city of modern Europe. Her origin dates from the invasion of Italy by Attila in 452. A number of the inhabitants of Aquileia, and the neighbouring territory, flying from the ravages of the barbarians, found a poor but secure asylum in the cluster of small islands opposite the mouths of the Brenta, on which the city is built. In this situation they were forced to cultivate commerce and its subsidiary arts, as the only means by which they could maintain themselves. At a very early period they began to trade with Constantinople and the Levant; and notwithstanding the competition of the Genoese and Pisans, they continued to engross the principal trade in Eastern products, till the discovery of a route to India by the Cape of Good Hope turned this traffic into a totally new channel. The Crusades contributed to increase the wealth, and to extend the commerce and the possessions of Venice. Towards the middle of the fifteenth century, when the Turkish sultan, Ma-

homet II., entered Constantinople sword in hand, and placed himself on the throne of Constantine and Justinian, the power of the Venetians had attained its maximum. At that period, besides several extensive, populous, and well cultivated provs. in Lombardy, the republic was mistress of Crete and Cyprus, of the greater part of the Morea, and most of the isles in the Egean Sea. She had secured a chain of forts and factories that extended along the coasts of Greece from the Morea to Dalmatia, while she monopolised almost the whole foreign trade of Egypt. The preservation of this monopoly, of the absolute dominion she had early usurped over the Adriatic, and of the dependence of her colonies and distant establishments, were amongst the principal objects of the Venetian government; and the measures it adopted with that view were at once skilfully devised, and prosecuted with inflexible constancy. With the single exception of Rome, Venice, in the 16th century, was by far the richest and most magnificent of European cities; and her singular situation in the midst of the sea contributed to impress those by whom she was visited with still higher notions of her wealth and grandeur. Sannazarius is not the only one who has preferred Venice to the ancient capital of the world; but none have so beautifully expressed their preference,

*‘Viderat Adriacis Venetam Neptunus in undis
Stare urbem, et toto ponere jura mari.
Nunc mihi Tarpeias quantumvis, Jupiter, arces
Objice, et illa tua moenia Martia, nit:
Si Tiberim pelago præfers, urbem aspice ntramque,
Illam homines dicas, haud posuisse Deos.’*

Though justly regarded as one of the principal bulwarks of Christendom against the Turks, Venice had to contend, in the early part of the 16th century, against a combination of the European powers. The famous league of Cambray, of which Pope Julius II. was the real author, was formed for the avowed purpose of effecting the entire subjugation of the Venetians, and the partition of their territories. The emperor and the kings of France and Spain joined this powerful confederacy. But, owing less to the valour of the Venetians than to dissensions amongst their enemies, the league was speedily dissolved without materially weakening the power of the republic. From that period the policy of Venice was comparatively pacific and cautious. But notwithstanding her efforts to keep on good terms with the Turks, the latter invaded Cyprus in 1570, and conquered it after a gallant resistance continued for eleven years. The Venetians had the principal share in the decisive victory gained over the Turks at Lepanto in 1571; but, owing to the discordant views of the confederates, it was not properly followed up, and could not prevent the fall of Cyprus.

The war with the Turks in Candia commenced in 1645, and continued till 1670. The Venetians exerted all their energies in defence of this valuable island, and its acquisition cost the Turks above 200,000 men. The loss of Candia, and the rapid decline of the commerce of the republic, now almost wholly turned into other channels, reduced Venice, at the close of the 17th century, to a state of great exhaustion. She may be said, indeed, to have owed the last 100 years of her existence more to the forbearance and jealousies of others than to any strength of her own. Nothing, however, could avert that fate she had seen overwhelm so many once powerful states. In 1797, the ‘maiden city’ submitted to the yoke of the conqueror; and the last surviving witness of antiquity—the link that united the ancient to the modern world—stripped of power and of wealth, fell from the list of independent states of the world.

Present Trade and Manufactures of Venice.—From the period when Venice came into the possession of Austria, down to 1830, it seems to have been the policy of the government to encourage Trieste in preference to Venice; and the circumstance of the former being a free port, gave her a very decided advantage over the latter. Afterwards, however, a more equitable policy has prevailed. In 1830 Venice was made a free port, and up to 1866, when ceded to Italy, participated in every privilege conferred on Trieste. But, notwithstanding this circumstance, the latter still continued to preserve the ascendancy; and the revival of trade that has taken place at Venice has not been so great as might have been anticipated. The truth is, that, except in so far as she is the entrepôt of the adjoining provs., Venice has no considerable natural advantage as a trading city; and her extraordinary prosperity during the middle ages is more to be ascribed to the comparative security enjoyed by the inhabitants, and to their success in engrossing the principal share of the commerce of the Levant, than to any other circumstance. Still, however, her trade is far from inconsiderable. The great articles of import are sugar, coffee, and other colonial products; indigo and other dye stuffs, olive oil, salted fish, various descriptions of cotton, woollen, and other manufactured goods; wheat and other grain, from the Black Sea; tin plates and hardware, and raw cotton. The exports principally consist of silk and silk goods, wheat and other grain, paper, jewelry, glass and glass wares, Venetian treacle, books, with a great variety of other articles, including portions of most of those that are imported. The smuggling of prohibited and overtaxed articles into Austria was formerly practised to a great extent.

The manufactures of Venice are various and extensive. The glass-works, which produce magnificent mirrors, with every variety of artificial pearls and gems, and coloured beads, situated on the island of Murano, employ, in all, about 4,000 hands, including the women and children employed in arranging the beads. Jewelry, including gold chains, is also extensively produced; as are gold and silver stuffs, velvets, silks, laces, and other expensive goods; and treacle, soap, earthenware, and wax-lights, to a greater or less extent. Printing is more extensively carried on in this than in any other city of Italy, and books form a considerable article of export. Ship-building is also carried on to some extent, both here and at Chiozza. In 1836, the first steam-engine seen in Venice was set up for a sugar refinery.

From the circumstance of Venice being situated nearly opposite the mouths of the Brenta, which bring down large quantities of mud, the probability is that the lagoon, by which she is surrounded, will ultimately be filled up. Under the republic this was a subject of great apprehension, and every device was resorted to that seemed likely to avert a result so pregnant with danger to the independence of the city. But now that there is no particular motive for hindering the mud from accumulating in the lagoon, it is probable that, in the course of time, the shallows will be converted into terra firma, and Venice lose her insular position.

VENLOO, a fortified town of Holland, prov. Limbourg, cap. cant., on the Meuse, 40 m. N.E. Maestricht, on the railway from Maestricht to Wesel. Pop. 7,304 in 1861. The town is surrounded by a marshy tract of country, but is the centre of an active transit trade, and has manufactures of pins, wafers, tobacco-pipes,

sugar refineries, and vinegar distilleries. It was formerly one of the Hanse Towns; in 1702 it was taken by the troops under Marlborough.

VENOSA (an. *Venusia*, on the frontier of Lucania and Apulia), a town of Southern Italy, prov. Potenza, 24 m. N. Potenza. Pop. 7,651 in 1861. The town stands on a perfectly flat, but not very extensive plain. It is reached by a long, winding ascent, when it breaks on the sight under a favourable point of view, chiefly due to the venerable aspect of its castle, an edifice of the 15th century, which, though a complete ruin, exhibits such magnitude of dimensions and regularity of construction as to form a very striking feature in the landscape. The walls of Venosa have long since been levelled with the ground, but the gateways still exist. It is well-built, and has numerous public edifices, including a large cathedral, 5 par. churches, an abbey church, a church erected in the 10th century from the materials of a Roman amphitheatre, in which are the tombs of Robert de Guiscard, and other Norman chieftains; a hospital, two workhouses, and a museum of antiquities.

Venusia is celebrated as the birthplace of Horace, the prince of Latin lyric poets and satirists, born on the 8th of December, anno 66 B.C. (A. U. C. 688), in the consulship of L. Manlius Torquatus.

'O nata mecum consule Manlio.' Lib. III. od. 21.

A bust of the poet, on a column of rough stone, has been set up in the city. In the vicinity are many places which have acquired interest from the references made to them by Horace.

VERA CRUZ, a town and the principal seaport of Mexico, on the SW. side of the Gulf of Mexico, cap. of the prov. of its own name, 225 m. SE. Tampico, and 195 m. E. by S. Mexico, with which it is connected by railway. Pop. estimated at 10,500 in 1864. The town is well built and clean, and its towers, cupolas, and battlements give it an imposing appearance from the sea. It is, however, surrounded by barren sand-hills and ponds of stagnant water, and is excessively unhealthy, being the principal seat of the yellow fever. The older inhabs. and those accustomed to the climate are not so subject to this formidable visitation as strangers, all of whom, even if coming from the Havannah and the W. India islands, are liable to the infection. No precautions prevent its attack, and numerous individuals have died at Xalapa, on the road to Mexico, who merely passed through this pestilential focus. The badness of the water at Vera Cruz is supposed to have some share in producing the complaint. The houses of Vera Cruz are mostly large, some of them being three stories high, built in the old Spanish or Moorish style, and generally enclosing a square court with covered galleries. They have flat roofs, glass windows, and generally wooden balconies in front, their interior arrangement being the same as in Old Spain. The town and castle are built of madrepora, the lime that forms the cement being of the same material. There is one tolerably good square, of which the government-house forms one side, and the principal church the other. The footpaths are frequently under arcades. No fewer than 16 cupolas or domes used to be counted from the sea, but only six churches are now in use; and most of the religious buildings have been neglected or abandoned since the Spaniards were expelled from the town. Rain-water is carefully preserved in tanks; and most sorts of provisions, excepting fish, are dear. Crowds of vultures and buzzards perform the office of

The castle of St. Juan de Ulloa, which commands the town, is built on the small island of the same name, about 400 fathoms from the shore. It is a strong citadel, and its NW. angle supports a lighthouse, with a brilliant revolving light, 79 ft. above the sea. The harbour of Vera Cruz is a mere roadstead between the town and castle, and is exceedingly insecure, the anchorage being so very bad that no vessel is considered safe unless made fast to brass rings fixed for the purpose in the castle wall; nor are these always a sufficient protection during strong N. winds. But notwithstanding its numerous disadvantages, Vera Cruz maintains its commercial importance; though latterly Tampico, in a healthier situation, with a better port, has been growing into consequence. The precious metals, cochineal, sugar, flour, indigo, provisions, sarsaparilla, leather, vanilla, jalap, soap, logwood, and pimento are the principal articles exported; and linen, cotton, woollen, and silk goods, paper, brandy, cocoa, quicksilver, iron, steel, and wine form the chief imports. The following table shows the total value of imports and exports to and from the port of Vera Cruz in each of the years 1858, 1859, and 1860:—

| Years | Imports | | Exports | |
|-------|------------|-----------|-----------|-----------|
| | Plastros | £ | Plastros | £ |
| 1858 | 10,038,500 | 2,007,700 | 2,915,600 | 583,120 |
| 1859 | 14,027,900 | 2,805,580 | 5,856,800 | 1,171,260 |
| 1860 | 13,198,400 | 2,639,680 | 6,883,600 | 1,376,720 |

Vera Cruz was founded towards the end of the 16th century, on the spot where Cortez first landed: it received the title and privileges of a city from Philip III. in 1615. The castle was taken by a French squadron, after a vigorous bombardment, in 1839; but was soon after restored to the Mexicans. It was again taken by a French force on the 8th of December, 1861, and became the nucleus of the war operations which led to the establishment of the Mexican empire. The new emperor, Maximilian I., landed here on the 29th of May, 1864.

VERCELLI (an. *Vercellæ*), a town of N. Italy, prov. Novara, on the Sesia, and on the railway between Turin and Milan, 39 m. NE. by E. Turin. Pop. 24,038 in 1862. The town has a large market-place, one of the best cathedrals in Piedmont, several other churches, and good private buildings, a large and well kept hospital, with (in its environs) some fine promenades. Its fortifications were destroyed by the French in 1704. It is the see of an archbishop, and has some silk manufactures; but its chief trade is in rice, raised in the neighbourhood. A canal connects Vercelli with Ivrea. The date of its foundation is uncertain, but it was a town of some note in the time of the Romans. After suffering severely from the northern invaders, it revived under the Lombards, and took the lead of Turin till the latter became the residence of the court.

VERDUN (an. *Verodunum*), a town of France, dép. Meuse, cap. arrond., on the Meuse, where it begins to be navigable, and by which it is divided into five separate parts, 30 m. NW. by N. Bar-le-Duc, on the railway from Paris to Metz. Pop. 12,394 in 1861. Verdun has a citadel, and its defences were improved by Vauban. It is tolerably well built; but several of its streets are badly paved and steep. The bishop's palace, new cavalry barracks, military magazines, and theatre are among the most remarkable buildings. It has churches, including the cathedral; a Protestant church, a synagogue, a communal college, and a library with 14,000 vols. A planted esplanade

separates the town from its citadel. Verdun has manufactures of fine striped serges, flannels, cotton yarn, and liqueurs, and several large tanneries. It was a station of importance under the Romans; and in the middle ages, under the Germanic emperors, it enjoyed the privileges of a free imperial city. It was definitively annexed to France in 1648, and is best known in modern times from its having been selected by Napoleon I. for the residence of the English prisoners detained in France after the rupture of 1803.

VERMONT, one of the states comprised in the North American republic, in the NE. section of the Union, making part of what is called New England, between lat. 42° 40' and 45° N., and long. 71° 18' and 72° 55' W.; having E. New Hampshire, from which it is separated in its whole extent by the Connecticut river; S. Massachusetts; W. New York, Lake Champlain forming half the boundary on this side; and N. Lower Canada. Length, N. to S., 157 m. Average breadth about 60 m. Area, 9,056 sq. m.; pop. 315,098 in 1861. The surface is generally hilly: it is traversed from N. to S. by a range of mountains, some summits of which rise to upwards of 4,000 ft. in height. About the centre of the state they divide into two ridges, the principal of which passes in a NE. direction into Lower Canada. These hills, being covered with fine forests of pine, cedar, and spruce, are called the Green Mountains, and their verdant appearance has given its name to the state. The rivers are inconsiderable: most of those flowing E. are merely small tributaries of the Connecticut; those on the W. side are larger and longer, and some of the principal rise on the E. side of the mountain chain, which they break through to fall into Lake Champlain. The climate varies according to differences of level and other circumstances; but the winters are colder than might have been expected, either from lat. or elevation. The soil is moderately fertile, the best arable land being between the hills and Lake Champlain; but the greater part of the surface is more suitable for pasturage than for tillage. Wheat, maize, rye, and potatoes are the chief articles of agricultural produce. Barley, buckwheat, hops, and tobacco are also grown, but in small quantities. Apples succeed better than in Europe, and are grown more than in any other state of the Union, New York excepted. The breeding of stock for export to Boston and the adjacent states is the chief branch of industry, and there are said to be about 1,400,000 sheep, 350,000 head of cattle, 60,000 horses, and nearly 300,000 hogs in Vermont. Iron is very abundant, and copperas to the value of from 70,000 to 80,000 dolls. is made annually from native pyrites. Marble of good quality is quarried, and lead is also among the mineral products. Linen and woollen fabrics are made in most families, and about 3½ million yards of cotton cloth and 112,000 lbs. of yarn are annually furnished by the various mills and factories. Pearl-ashes and lumber are among the other chief exports; but as the foreign trade of the state is principally carried on through the adjacent states, no proper estimate can be given of its amount.

The legislature formerly consisted of a single house of assembly; but in 1836 two separate houses (a senate of 30 members, and house of representatives composed of 1 member from each town) were established, which, together with its governor, lieutenant-governor, and executive council, are chosen annually by the people. The right of suffrage is vested in every male inhab. twenty-one years of age, who has resided in the state for the year previously to the election. The judicial power is in a supreme court of 6 judges, and co.

courts, each composed of 1 judge of the supreme court and 2 assistant judges. The supreme court sits once, and the co. courts twice, in each co. Judges are chosen annually by the general assembly, and a court of censors by a popular vote once in seven years. Vermont is divided into 14 cos. Montpelier, the cap., and Burlington, where the university of Vermont is situated, are both small towns. Schools are widely diffused in this state, and Middleburg college and Norwich university are flourishing institutions. The public revenue, in 1863, amounted to 2,852,451 dollars, and the expenditure to 2,730,018 dollars.

This state was first explored by the French Canadians; but the earliest settlement was made by the English of Massachusetts, in 1724. Subsequently, New Hampshire and New York disputed the claim to this territory; but it was finally ceded by the British parliament to the latter. But, dissatisfied with this connection, it declared itself independent in 1777.

VERONA, a celebrated city of Northern Italy, cap. prov. of same name, on the Adige, at the point where the last declivities of the Alps sink into the great plain of Lombardy, 64 m. W. Venice, on the railway from Milan to Venice. Pop. 59,169 in 1857. Verona is divided into two unequal parts by the Adige, which sweeps through it in a bold curve, and forms a peninsula, within which the whole of the ancient and the greater part of the modern city is enclosed. The river, which is wide and rapid, is here crossed by four noble stone bridges. Verona is an extremely well situated, well built, and most interesting city. 'You enter it,' says a traveller, 'by a magnificent approach, and a street probably the widest in Europe. This street is indeed short, and single in its breadth, but the city in general pleases by its picturesque appearance, to which an abundance of marble quarries has not a little contributed, thirty-five varieties of this species of stone being found in its neighbourhood.' The houses frequently present, in their form and ornaments, fine proportions and beautiful workmanship. The old walls and towers still remain, and the city has five gates, two of which are fine structures by Sanmichele. Its former military defences were destroyed by the French, after the revolt of the inhabs. in 1797; but extensive fortifications have again been constructed, in recent years, by the Austrians.

The great glory of Verona is its amphitheatre, one of the noblest existing monuments of the ancient Romans. Excepting the colosseum at Rome, it is the largest extant edifice of its class. Like all other structures of the same kind, it is elliptical, the extreme length of its transverse and conjugate diameters to the outside of the outer walls being respectively about 510 and 410 ft.; while those of the arena are 249 and 146 ft. Its outer wall or cincture, which had 72 arches in every story, has been mostly destroyed, with the exception of one fragment containing three stories of four arches each, rising to the height of about 100 ft. Over this, however, there was a fourth story, so that the entire height of the building, when perfect, must have exceeded 120 ft. Internally it has suffered comparatively little, and its concentric rows of benches or seats, of which 43 still remain, exclusive of 2 sunk below ground, with its corridors and stairs, are wonderfully well preserved. Each row of seats is $1\frac{1}{2}$ ft. in height, and as much in breadth; and allowing $1\frac{1}{2}$ ft. of space to each individual, the amphitheatre may have accommodated 22,000 spectators. The interior of the amphitheatre having been in parts a good deal dilapidated, it was repaired at different periods in the 16th century, when the broken and

wanting seats were replaced by others. But these repairs, though, on the whole, highly creditable to the Veronese, do not appear to have been well executed. The ancient benches were formed of vast blocks of marble, admirably cut and jointed; whereas the modern benches consist of a soft flaky stone, which has in parts yielded to the weather; but little care has been taken in laying the stones, and in parts the elliptical curvature has not even been observed. These defects, however, are not visible on a cursory inspection of the building, which astonishes alike by its mass, its antiquity, and its preservation.

Owing to the want of inscriptions, and of all reference to its origin in the classical writers, we are without any authentic information either as to the founders or the æra of this great work. Most probably, however, it was built somewhere between the reigns of Titus and Trajan, or in the early part of that of the latter. In the middle ages it was sometimes used for the exhibition of shows and sports, and sometimes as an arena for judicial combats. In more modern times, a bull fight was exhibited here in honour of the Emperor Joseph II., then at Verona; and, at a still later period, the Pope, in passing through the city, gave his benediction to a vast multitude collected in the amphitheatre. The French, when masters of Verona, had the bad taste to erect in the arena a wooden theatre, in which plays, farces, and equestrian feats were performed for the amusement of the troops.

The amphitheatre is not the only monument of antiquity that distinguishes Verona. In the middle of a street called the Corso is an ancient double gateway, which, on the strength of an inscription importing that the adjacent walls were built by Gallienus, has been named after that emperor; but though loaded with supernumerary ornaments, the Veronese antiquaries affirm that its style is too good for his age. Each gateway is ornamented with Corinthian pilasters supporting a light pediment, and above are two stories with six small arched windows in each. The whole is of marble. The remains of another gateway, of a similar but chaster form, probably the entrance to the ancient forum, are to be seen in another street; and near the old Gothic castle is the arch of the Gavii, perhaps part of a sepulchral edifice, but, at any rate, of very remote antiquity. Two arches in the purest style of Roman architecture make a part of one of the bridges, and the remains of another bridge, and the traces of a very large ancient theatre and naumachia are still extant. Addison and Evelyn speak of a triumphal arch of Flaminus, as one of the noblest remains of antiquity in Europe; and of an arch commemorating the victory of Marius, with various temples and aqueducts; but as few or no remains of these exist at present, it would seem that the antiquities of Verona had suffered greatly since the beginning of last century.

The ecclesiastical buildings comprise interesting specimens of middle-age architecture. The cathedral, an edifice of the 12th century, has nothing particularly remarkable except the Assumption of Titian, and the tomb of pope Lucius III., who, when driven from Rome in 1185, found a secure asylum in this city. In respect of architectural merit the cathedral is very inferior to the church of St. Anastasia, built by the Dominicans at the beginning of the 13th century. The church of St. Zeno, a curious structure, with a remarkable crypt, is said to have been founded by Pepin, but it was not completed till 1178. Its front is covered with bas reliefs in stone, its doors with sculpture in bronze of a very early date, and

near it are the remains of a palace in which the German emperors occasionally resided during the 12th and 13th centuries. Several other churches are worthy of notice: in that of San Giorgio is a fine picture of Paul Veronese. The tombs of the Scala family (*Scaligeri*), once lords of Verona, stand in an inclosure in one of the thoroughfares. They are models of the most elegant Gothic, light, open, spiry, full of statues caged in their fretted niches; yet, slender as they seem, these tombs have stood entire for 500 years in a public street the frequent theatre of sedition. The Ponte del Castel Vecchio, built in 1354, is remarkable for an arch 161 ft. in span, forming part of a circle. The town-hall is ornamented externally with busts of the most celebrated natives of Verona, and has within it some fine paintings. The exchange; the Museo Lapidario and Philoti, both having extensive collections of ancient monuments; the opera-house, the fine Ionic portico of which forms, with the arcades of the museum, three sides of a handsome square; the episcopal and new viceregal palaces; the Palazzo Bevilacqua, an edifice by Sanmichele; the Canossa palace and several other noble residences; the lyceum, philharmonic academy founded by the Marquis Maffei, and arsenal, are among the most conspicuous edifices in the city. Verona is the seat of the high court of justice and of the superior military authorities for the now reduced Lombardo-Venetian kingdom, and of a court of primary jurisdiction for its deleg. It is a bishop's see, and has several gymnasia, a theological seminary, and numerous royal and other schools, learned societies, public and private libraries. English travellers are shown what is called 'Juliet's tomb,' which is merely an old sarcophagus without a cover, lying in a garden where it has been made use of as a cistern.

Verona has numerous silk twist factories, establishments for weaving silks, large leather, earthenware, and soap factories, and factories for the weaving of linen and woollen fabrics. Its trade is chiefly in the product of these, and in raw silk, grain, oil, sumach, and other agricultural produce. It has two weekly markets, and two considerable annual fairs, each lasting 15 days.

There exist no certain details as to the origin of Verona. Under the Romans, however, she became a flourishing city, and in the time of Strabo was superior to Brixia, Mantua, Regium, and Comum. She was the cap. of the kingdom of Italy from the time of Odoacer to that of Berengarius, and from the 12th to the 15th century she was the cap. of a considerable territory, governed successively by the Scaligers, Visconti, and other nobles. Under the former, in the 13th and 14th centuries, occurred the feuds between the Cappelletti and Montecchi, immortalised by Shakspeare. In 1405 Verona submitted to Venice, of whose dominions it continued to form an important portion till the overthrow of the Venetian republic in 1797. In 1822 it was the seat of a congress.

Perhaps no city of Italy has given birth to a greater number of distinguished men than Verona. Among these may be mentioned Catullus,—

'Tantum magna suo debet Verona Catullo,
Quantum parva suo Mantua Virgilio.'

Martial, lib. xiv. epig. 195.

Macer, Cornelius Nepos, and Pliny the Elder, who shed in antiquity an imperishable lustre over the place of their birth. At a later period Guarini, Caldlerini, Panvinus, and Fracastorius contributed to the revival of literature and of the ancient fame of their native city; which in more mo-

dern times has been still farther extended by the labours of the famous painter Paolo Cagliari, surnamed Veronese, born here in 1530; Bianchini, distinguished alike as a mathematician, a historian, and a critic; Maffei, whose 'Verona Illustrata' is a work of the greatest research and value; and the poet Pindemonte. Vitruvius, in antiquity, and the famous Julius Cæsar Scaliger, have also been included, though on no good grounds, among the illustrious natives of Verona. The latter, indeed, represented himself as the eldest son of one of the Scaligers, lords of Verona, and as entitled to that seigniorship. But it has been shown that there is not so much as the shadow of a foundation for this statement; that Scaliger was, in fact, the son of a miniature-painter of the name of Bordoui, and was most probably born at Padua.

VERSAILLES, a town of France, formerly the chief residence of the French court, dép. Seine-et-Oise, of which it is the cap., in an undulating plain, 9 m. SW. Paris, with which it is connected by two lines of railway. Pop. 43,899 in 1861. Versailles is one of the handsomest towns in France; it consists principally of three wide streets, lined with trees, diverging from the Place d'Armes, an open space in front of the palace: the central and widest of these streets is called the Avenue de Paris; and those on the N. and S., the Avenues of St. Cloud and Sceaux. The other streets, though of less width, are equally regular, cross each other at right angles, and are lined with handsome residences. The cathedral of St. Louis, founded by Louis XV. in 1743, that of Notre Dame, built after the design of Mansard, in the previous reign; the church of St. Symphorien, the town-hall, prefecture, theatre, royal college, public library with 48,000 vols., civil and military hospital, barracks, dépôt of naval and colonial archives, and hall of the jeu de paume, in which the deputies of the national assembly made their famous declaration, are among the principal public buildings. In one of the open spaces is a marble statue of General Hoche, a native of Versailles. The town is ornamented by many handsome fountains, but it wears a dull and deserted appearance, being no longer resorted to by the court and nobility.

Versailles is wholly indebted for its celebrity, and, indeed, for its existence, to the royal palace in its immediate vicinity. Louis XIII. had a hunting seat here; but the present edifice, which is of prodigious size and magnificence, was erected by Louis XIV., who expended immense sums on its construction and embellishment. On the E. side, where it faces the Place d'Armes, it consists of only an irregular succession of buildings, inclosing a few small courts. But on the opposite side, facing the gardens, it presents a noble façade, 645 yards in length, 3 stories in elevation, ornamented with Ionic pilasters, and with 80 statues 16 ft. in height, allegorically representing the months, seasons, arts and sciences, and crowned by a balustrade. Its galleries and saloons, enriched with every variety of coloured marbles, and splendidly gilt, are alike vast and magnificent. The Salon d'Hercule, and the Salles des Maréchaux, de Venus, Diane, Mercure, Mars, Apollon, l'Abondance, and de la Guerre, so named from the paintings on their ceilings, walls, or other appropriate devices, are all noble apartments. The Grande Galerie is 228 ft. in length, by 32 ft. in breadth, and 42 ft. in height: the ceiling, painted by Le Brun, represents some of the most striking events in the early part of the reign of Louis XIV. At one of its extremities is the Salon de la Paix, corresponding with the

Salon de la Guerre. Besides its innumerable apartments, the palace has an elegant chapel, in which the unfortunate Marie Antoinette was united to Louis XVI. on the 16th of May, 1770, and an opera-house, or theatre, capable of accommodating 3,000 spectators.

The palace had not been occupied by the court since 1789, and was getting into a state of disrepair, when it was renovated and transformed by King Louis Philippe into a national museum, to illustrate the history, and to exhibit the progress of arts, arms, and civilisation in France. In pursuance of this design, many small apartments, formerly appropriated to the lodging of the various functionaries attached to the court, were converted into noble saloons. Of these, the Salle des Maréchaux, noticed above, containing portraits of all the marshals of France, the Galerie des Batailles, the Salle de 1830, and the Galerie de Sculpture, are amongst the most striking. The palace is filled with an immense collection of statues and paintings, exhibiting all the principal personages and events in the history of the monarchy, from the reign of Clovis down to the present day. The library comprises copies of all works having reference to the history and state of France.

Immediately adjoining the palace on the W. is the little park, comprising the gardens, numerous reservoirs, fountains and public walks; the orangery: Bains d'Apollon, and Bassin de Neptune, both having sculptured groups of much merit. In this park are also the Great and Little Trianon, two royal palaces on a minor scale, and the grand waterworks, of unrivalled magnitude, which, however, play only on great occasions. They are supplied from the Seine by the aqueduct of Marly. The great park comprises a large tract of country, including several villages.

Versailles has some manufactures of cotton yarn and wax lights, but only on a limited scale. It is the see of a bishop, and the seat of tribunals of primary jurisdiction and commerce, and of societies of literature and agriculture. Philip V. of Spain, Louis XV., Louis XVI., Louis XVIII., Charles X., and several other eminent personages, were born at Versailles. It is also intimately connected with the history of the revolution. The states-general met in the great hall of the palace on the 5th of May, 1789. And here, on the 17th of June, the *tiers état*, having been joined by the whole body of inferior clergy, and some of the nobles, constituted themselves the national assembly, and the sole representatives of the people. On the 20th of the same month the deputies, finding the doors of the hall in which they had been accustomed to meet shut against them, retired to the Tennis Court, and took the famous oath, by which they bound themselves to continue their sittings till the constitution of the kingdom had been fixed on a solid basis. The revolution, thus fairly begun, set in with a violence which the vacillation of the good-natured imbecile king served only to aggravate. On the 5th and 6th of October the palace of Versailles was forced by a mob, consisting of the lowest scum of Paris, who succeeded in carrying off the king and his family to the capital.

VERVIERS, a town of Belgium, prov. Liège, cap. arrond., on the Vesdre, by which it is intersected, and which is here crossed by two stone bridges, 14 m. E. Liège, on the railway from Brussels to Cologne. Pop. 31,893 in 1860. Verviers is divided into the upper and lower town; some of its streets are wide and well built, but many others are quite the contrary. When erected into a town, in 1651, it was surrounded with walls, but these were afterwards demolished

by the French. A new church, the town-hall, and a little theatre with a front of the Ionic order, are handsome buildings. It has a tribunal and chamber of commerce, a college, hospital, and several asylums, nearly thirty public schools, and a philanthropic society. The Vesdre is divided into numerous canals, for the use of the various manufactories, which have increased rapidly of late years. These comprise numerous woollen cloth factories, dyeing-houses, with fulling and other mills, soap works, breweries, iron and lead foundries. It has two markets weekly, and four annual fairs. Great quantities of fullers' earth are dug up in the vicinity.

VESOUL, a town of France, dép. Haute-Saône, of which it is the cap.; in the valley of the Durance, at the foot of the Motte de Vesoul, a height covered with vineyards and meadows, 56 m. ENE. Dijon, on the railway from Paris to Basel. Pop. 7,579 in 1861. The town is well built and clean; most of its streets are wide and straight, and it has several good public buildings, including cavalry barracks, civil and military hospital, theatre, prefecture, par. church, public baths, court-house, and town-hall. It has, also, a public library, said to comprise 21,000 vols., a museum, and a departmental nursery-ground; with manufactures of calico and gold lace, and some trade in corn, wine, salt, nails, and hardware. Near it are mineral waters, but they are turned to little account.

VESUVIUS (MOUNT), a celebrated mountain of S. Italy, *Ætnæ ignis imitator*, being the only active volcano, of any consequence, at present existing on the European continent; on the E. shore of the Bay of Naples, and 10 m. E. by S. from the city, the crater being in lat. 40° 48' N., long. 14° 27' E. Vesuvius does not belong to the Apennine system, but rises, altogether unconnected with any of its ramifications, out of the great plain of Campania. Including M. Somma on its inland side, it consists of a circular mass, the extreme height of which, about 8,890 ft., is to its diameter, 8 m., nearly as 1 to 11: it is somewhat less elevated than Mount Hecla, and only two-fifths the height, with considerably less than one-third the circuit of Etna. An English traveller, Mr. Maclaren, by whom it has been carefully examined and elaborately described, gives the following account of its external appearance:—'To gain a distinct conception of the aspect of the hill, shape out for yourself, by a mental effort, the following objects:—*First*, a sloping plain, 8 m. long and 3 m. broad, stretching up, with a pretty rapid ascent, to an elevation of more than 2,000 ft., very rugged in the surface, and covered everywhere with black burnt stones, like the scorix of an iron furnace; *second*, at the head of this plain, and towering over it, a cone of the same black burnt stones, with sides remarkably straight and uniform, shooting up in the blue sky to a further elevation of 1,500 ft.; *third*, behind this cone, a lofty circular precipice (the front of Monte Somma), 1,400 ft. high, and 3 m. long, standing like a vast wall, and of the same burnt appearance; *fourth*, at the lower side of the plain, between the burnt ground and the sea, a belt of land, 2 m. broad, laid out in vineyards, but intersected every one or two furlongs by terraces of the same black calcined matter, projecting like offshoots from the central mass, and now and then unveiling old currents of lava from beneath them. Very little lava is visible; but the course of the different currents is traced by the long terraces of scorix which cover and flank them. The top of the cone, which is about 2,000 ft. in diameter, has a regularly formed crater, shaped exactly like a

tea-cup. I estimated its width at 1,500 ft. and its depth at 500. The rim, or crest, of loose and solid matter which surrounded it is of very unequal breadth, 400 or 500 ft. on the W. side, and apparently not 50 at some other parts of the circumference. Snow having fallen some days before, clouds of steam rose from the cavity, which, however, were neither so dense nor so constant as to prevent us from occasionally seeing the bottom of the crater very distinctly. It was nearly level, without crevices or openings, and covered with loose blocks of lava of no great size.

Geologically considered, Vesuvius is but the representative of a more ancient and much larger volcano, of which Monte Somma is a remnant, and in the centre of which the modern vent has been upheaved. Monte Somma, on the N.E. side of Vesuvius, is a ridge extending 3 m. in length, forming about one-third part of a circle, and rather less lofty than the present cone of Vesuvius. The average distance of the escarpment of Somma from the centre of the cone is about 1 m.; the back of the ridge dips outwards at an angle of 26° , while the front towards Vesuvius is nearly vertical, rising 1,877 ft. (420 metres) above the level space which divides it from Vesuvius, and which is called the *Atrio dei Cavalli*, or 'vestibule of horses,' because visitors to the crater are obliged to leave their horses, and perform the rest of the journey on foot. The *Atrio dei Cavalli* forms the segment of a circular ring, about one-third m. in breadth, at the base of the cone, dividing it from Somma, and having a continuation, in the shape of a depression, on the other sides, where a slight projection, called the *Pedimentina*, is supposed to indicate the place of the rest of the ancient escarpment, which, when complete, must have formed a ring 6 m. in circ.; being of greater extent than any crater with which we are acquainted. Hence, Mr. Lyell (*Geology*, ii. 80) considers it probable that the ancient volcano was higher than Vesuvius, and that the first recorded explosion of the latter blew up a great part of the cone itself, 'so that the wall of Somma, and the ridge or terrace of the *Pedimentina*, were never the margin of a crater of eruption, but are the relics of a ruined and truncated cone.' This species of phenomenon has not been without an example in modern times. During the eruption of October, 1822, more than 800 ft. of the cone were carried away by explosions, reducing the height of the mountain from about 4,200 to 3,400 ft.

The rocks of Somma and Vesuvius are mineralogically distinct. Somma, like Vesuvius, is composed of strata of fragmentary and stony matter intermixed; but the stony matter of Vesuvius consists of lava, more or less cellular, scoriaceous on the surface, and forming long narrow bands on the surface of the hill. That of Somma is a leucite porphyry, containing shells, and continuous with the beds under the tufa which forms the soil of the plain of Naples. Mr. Lyell says (*Geology*, ii. 92), 'It is an extraordinary fact that in an area of 3 sq. m. round Vesuvius, a greater number of simple minerals have been found than in any other spot of the same dimensions on the surface of the globe. Haüy only enumerated 380 species of simple minerals as known to him; and no less than 82 had been found on Vesuvius before the end of the year 1828.' Many of these are peculiar to that locality. The flora of Vesuvius is also peculiar in Italy, embracing several *Euphorbiaceæ* and other plants not found elsewhere in that peninsula. The greater part of the mountain has, indeed, a bare and rugged aspect; but around its base, as previously stated, is an extremely fertile and picturesque region, teeming

with plantations, villages, and white country-houses. The land here is divided into small farms of 5 or 6 acres, supporting each a whole family, and the pop. is estimated at not less than 5,000 persons to a sq. league. The land is cultivated, like a garden, with the spade, and yields three crops a year, without fallows or manure. The proprietor of the soil usually receives two-thirds of the gross produce in kind for his rent. The leases are long, and the intercourse between farmer and tenant is generally mild and liberal. It is on the slope of Vesuvius that the *Laeryma Christi* is grown. This, which is a red luscious wine, is better known by name than in reality, very little of it being produced, and that little being principally reserved for the royal cellars. The *vino Greco* and the muscadine wines of Vesuvius are also deservedly celebrated.

Vesuvius, being so near Naples, is usually visited by strangers resorting to that city. An English traveller gives the following notice of his ascent to the mountain: 'We left Portici, ascending gradually among cultivated fields and vineyards occasionally traversed by streams of old lava, black, rough, and sterile; and in $1\frac{1}{2}$ hour reached the Hermitage, a convent where a few monks keep a sort of inn for the visitors of Vesuvius. Further up, we traversed large fields of lava, extremely rough; and at the base of the cone prepared for the ascent over a heap of crumbling ashes and cinders, extremely steep, of course, as it formed an angle of nearly 45° . In about one hour, stoppages included, we found ourselves on extremely hot ground, intolerable to the hand, and fatal to the soles of our shoes; it teemed with hot vapours, and was covered with beautiful efflorescences of sulphur. Smoke issued from numerous crevices; at the entrance of which a piece of paper or a stick took fire in a few seconds: and, what seems strange, a stone thrown into one of these openings increased the smoke at all the others. Stooping low, we could hear a noise very like that of a liquid boiling. The hard but thin crust upon which we stood appeared to have settled down in some places; a woful indication of its hollow state. After a few steps more, we came to the edge of a prodigious hole, on the very summit of the cone, being the crater formed by the last eruption, four months previously. This hole was not by any means the tremendous thing we expected—a fathomless abyss, fiery and black, with lava boiling at the bottom—but a slope of grey ashes and cinders, much like that by which we had ascended, or scarcely more precipitous, and ending at the depth of 400 or 500 ft., in a level place, with grey ashes like the rest.' The view from the summit is far inferior in extent and magnificence to that from Etna, but is, notwithstanding, extremely various, rich, and beautiful. The whole ascent and descent to and from Naples may be readily accomplished in seven or eight hours.

From the period of the earliest records down to the reign of Titus Vespasian, the volcano seems to have been inactive; the appearance of its crater and its cavernous structure being the only indications by which Strabo conjectured that it might at some distant period have been on fire. But in the first year of the reign of Titus (A. D. 79) the volcano that had so long been dormant burst forth with renewed and tremendous energy, in one of the most destructive eruptions of which history has preserved any account. The large and flourishing cities of Herculaneum and Pompeii, near the sea, were both overwhelmed by its lavas and ashes. Even the figure of the coast was materially changed; and for the space of more than 1,600 years all trace of the buried cities was completely

lost, and they were only accidentally discovered in the course of last century. The elder Pliny lost his life during this dreadful eruption, which has been described by the younger Pliny, by whom it was witnessed (Epist., lib. vi. 16 and 20), and by Tacitus. '*Luctum,*' says the latter, '*attulit atrox et continuus tremor terræ, quem secuta est horrenda Vesuvii montis conflagratio. Pulcherrima Campaniæ ora misere fedata: obrutæ duæ urbes Herculaneum et Pompeii: vasta hominum strages, quos inter periere Agrippa ejusque mater Drusilla. At studiorum famâ mors C. Plinii fuit insignior.*' (App. Chron.)

Since the destruction of Herculaneum and Pompeii there have been 45 authenticated eruptions; but none of them have been equal to it in destructive power. Of those which happened down to the 12th century, we have few accounts; and from 1138 to 1631 there were but two slight eruptions: during this interval, however, Etna was in a state of great activity, and the formation of Monte Nuovo, in the Phlegrean Fields, took place. In 1631 a violent eruption occurred, during which seven streams of lava poured from the crater; and, from 1666 to the present time, there has been a series of eruptions, the longest intervals between them having rarely exceeded ten years. The energy of Vesuvius, when in action, is extremely great, and the spectacle magnificent and sublime. In the eruption of 1779, jets of liquid lava were thrown up to the height of at least 10,000 ft., having the appearance of a column of fire; and, in that of 1793, millions of red-hot stones were shot into the air to full half the height of the cone itself, and then bending, fell all round in a fine arch, covering nearly half the cone with fire. The lava, however, does not always issue from the crater at the summit, but, as in Etna, sometimes from small cones raised in various parts of the declivity; and occasionally three or four of these cones are in a line, which generally points towards the great crater. The eruptions of 1760, 1794, and 1834 were of this description.

VIATKA, a government of European Russia, chiefly between the 56th and 60th degs. of N. lat., and the 46th and 54th of E. long., having N. Vologda, E. Perm, S. Orenbourg and Kasan, and W. Nijni-Novgorod and Kostroma. Area, estimated at 52,900 sq. m. Pop. 2,123,904 in 1858. The slope of the country is towards the W. and S., in which direction the Viatka, a tributary of the Wolga, flows, traversing the government nearly in its centre. The Kama, which forms part of its E. and S. boundaries, also rises in this gov. Surface generally undulating and even mountainous towards the E., where it consists of the lower Ouralian ranges. The soil is mostly good, though encumbered in parts with extensive marshes. Climate severe in winter, but not usually unhealthy. Agriculture is the principal occupation of the inhabs., particularly along the banks of the large rivers; and in ordinary years an excess of corn is grown. Rye, barley, and oats are the principal grains; very little wheat is raised, but pease, lentils, and buckwheat are grown, with large quantities of hemp and flax. The surplus produce goes chiefly to the N. Russian provs. Potatoes are not much cultivated. Fruit is not plentiful; apples scarcely ripen. The forests are very extensive; they consist mostly of firs, intermixed with oak, elm, alder, lime, birch, and other trees. Cattle breeding, though a secondary branch of industry, is still of importance; and a good many small but robust horses are reared. Sheep are few. Furs, tar, iron, and copper are among the chief products. Manufactures, though not extensive, appear to be on the increase: there are

factories for woollen cloths, linen and cotton stuffs, paper, soap, potash, copper, and iron wares, employing between 6,000 and 7,000 hands. About 2 million archines of woollen, and perhaps nearly double that quantity of linen cloth, are supposed to be annually made in the houses of the peasantry; and large quantities of spirits are distilled. Near Sarapoul is an extensive manufactory of arms, and at Votka anchors, gun carriages, and iron machinery of various kinds are made on a large scale. The government exports corn, flax, linseed, honey, tallow, leather, silk goods, iron, and copper to Archangel, and corn and timber to Saratof and Astrakhan. It receives manufactured goods from Moscow and Nijni-Novgorod, tea from Irbit, and salt from Perm. Viatka, the cap., is the great emporium of the trade. It is subdivided into 11 districts—Viatki, Slobodskoi, and Sarapoul being the chief towns. The inhabitants consist of various races: Russians, Votiaks (of a Finnish stock, and from whom the prov. has its name), Tartars, Baschkirs, and Teptiars, professing many different religions. The Mohammedans are estimated at nearly 50,000, and the Shamanists and idolators at 3,500. This government is united under the same governor-general with Kasan; but the Tartars and Finns are subordinate to the jurisdiction of their own chiefs.

VIATKA, a town of European Russia, cap. of the above gov., on the Viatka, near the confluence of the Teheptsä, 230 m. W. by N. Perm, and 250 m. NE. Nijni-Novgorod. Pop. 9,750 in 1858. The town has several stone churches, one of which, the cathedral, with a silver altar ornamented with bas-reliefs, cost 130,000 roubles. Here are numerous convents, with an episcopal seminary, gymnasium, and high school, founded in 1829. It was annexed to Russia by Ivan Vasilievitch, about the middle of the 16th century.

VICENZA (an. *Vicentia*, or *Vicetia*), a city of Northern Italy, cap. prov. of its own name, on the Bacchiglione, where it receives the Retrone, 26 m. ENE. Verona, and 37 m. W. by N. Venice, on the railway from Milan to Venice. Pop. 33,306 in 1862. Though surrounded by dry moats and dilapidated walls, it is one of the best built cities of Italy. It has a great number of well-designed houses, many of which are of very fine architecture; and even those which are less deserving of praise would, from their number and the richness of their ornaments, produce an appearance of magnificence in the city, if they were well kept up; but they appear forlorn, neglected, and half uninhabited. Vicenza 'is full of Palladio,' the modern Vitruvius, born here in 1518, who has lavished all his skill on his native place. Besides about 20 palaces, the town-house, or basilica, the church of Sta. Maria del Monte, the Rotunda, the Olympic triumphal arch leading to the Campo Marzo, the theatre of the Olympic Academy, are the works of this architect. The most celebrated of these is the Olympic Theatre, a noble edifice, constructed upon the plan of the ancient theatres, and bearing a great resemblance in all essential particulars to those of Herculaneum and Pompeii. The palatial edifices of Vicenza, though inferior in materials and size to those of Genoa, are much superior in external appearance. The Vicentine villas, which have been often imitated in England, are as beautiful as the larger buildings within the city. Many of them are on the Monte, a pleasant hill adjacent to the town, the favourite resort of the Vicentine gentry, and whence an extensive and rich view is obtained of the great plain of Lombardy. Vicenza has few Roman antiquities, and not many interesting specimens of middle-age architecture. The

cathedral has a front exhibiting a mixture of different styles, and its interior presents a nave only, which is of great width, neither the length nor height being in proportion. The church of St. Corona has a fine 'Adoration of the Magi,' by Paul Veronese; the church of St. Lorenzo is now converted into a barn. All these buildings are in the pointed style, which prevailed in this part of Italy during the 13th century, and of which the church of St. Anastasia at Verona is one of the finest examples. Nine bridges cross the different rivers at Vicenza, one of which, the Ponte de Sanmichele, is by Palladio, and may be compared with the Rialto at Venice.

Vicenza is a bishop's see, the seat of the council, and of the superior courts for the prov., and has a lyceum, two gymnasiums, an ecclesiastical seminary, and many inferior schools, eleven hospitals and orphan houses, a government pawn-bank, public library, societies of agriculture, &c. The Olympic Academy was founded in 1555, for the encouragement of polite literature, and still, as formerly, includes the most respectable citizens. Some of the palaces have a few fine paintings.

The Vicentines are said to manifest an aptitude for manufactures, and are perhaps inferior in industry only to the inhabs. of Verona. They weave silk and woollen fabrics, and make leather, whale-bone articles, earthenware, hats, gold and silver articles, and fire-engines, and have a considerable trade in agricultural produce. 'As you enter the Vicentine territory,' says a recent traveller, 'you may observe a visible improvement in the mode of cultivation. The fields are kept cleaner, and everything indicates superior industry and exactness. If we except the resemblance of dialect, and some community of trifling customs, Calais and Dover are not more unlike than Padua and Vicenza, long subjected to the same government, and connected by facilities of communication both by land and water. To say nothing of the outward appearances of the two cities, which present a most remarkable contrast, it would seem as if the inhabs. were of different blood—as if a colony of Venetians, making a knight's move, had leaped over Padua, and established themselves at Vicenza.'

Vicentia was anciently a Roman *municipium*, but one of little consideration. (Tacit. Hist., iii. 8.) It was sacked by Alaric in 401, and successively pillaged by Attila, the Lombards, and the emperor Frederick II. Early in the 15th century it came into the possession of the Venetians, who held it till the downfall of the republic in 1796. Napoleon conferred the title of duke of Vicenza on Caulaincourt.

VICH (an. *Ausona*), a town of Spain, in Catalonia, prov. Barcelona, in an undulating plain, 36 m. N. Barcelona. Pop. 13,712 in 1857. The town is of a very irregular figure; some parts of it are well built, and two of its squares are handsome. The cathedral is inferior in many respects to the other churches. It has numerous convents, a seminary, college, and several hospitals, with manufactures of linen and hempen fabrics, printed cottons, woollen cloths, hats, and leather.

VICTORIA. See AUSTRALASIA.

VIENNA (Germ. *Wien*, Lat. *Vindabona*), a city of Germany, cap. of the Austrian Empire, prov. Lower Austria, on an arm of the Danube, where it is joined by the small rivers Wien and Alster, 190 m. E. Munich, 330 m. SSE. Berlin, and 800 m. NW. Constantinople, in the centre of the Austrian railway system. Pop. 553,970 at the census of 1857. The Danube, opposite Vienna, is divided into three or four separate arms, the most southerly of which washes the walls of the city. Between the third and fourth of these arms, however, is the

important suburb of Leopoldstadt, with the Prater, the Augarten, and several other favourite promenades. This part of Vienna communicates with the city and the suburbs on the S. side of the Danube by five bridges, of which the Ferdinands Brücke, in the centre, is the chief. Vienna stands in a plain, elevated about 520 feet above the level of the sea; but so little above that of the Danube in this part of its course, that, with the exception of its S. extremity, which is on the gradual ascent to the heights of Kahlenberg, most part of the city is liable to inundations. Vienna is of a nearly circular form, being about 10 m. in circ. The city proper, in the centre, is, however, scarcely 8 m. round. It is enclosed by ramparts of brickwork, and a beautiful glacis from 2 to 3 furlongs broad, planted with trees, laid out in public walks, forming, like the parks in London, the lungs of the metropolis; these separate the city from its numerous suburbs, which, on the S. side of the Danube, are again enclosed by a line of ramparts, originally thrown up in 1703.

Vienna, from its size, wealth, population, and activity, deserves to be compared with London and Paris better than any other European capital. Its chief points of external difference from these cities are, that it preserves about it more antique grandeur, and that it is the old, and not the new part of the town which forms the fashionable quarters. Most part of the principal edifices are within the city, where the houses are usually four or five stories high, and the streets irregular, narrow, and dark, but where the imperial family and most of the nobility reside. Nearly all the best shops and principal hotels are also in this quarter. In the suburbs, however, are several of the palaces and garden villas of the higher nobility, including those of Princes Lichtenstein, Esterhazy, Schwartzenberg, Anersberg, and Metternich; the Belvidere Palace, built by Prince Eugene, but appropriated by Joseph II. to the imperial picture gallery, and other public institutions, with immense barracks, magazines, and other military establishments. The streets in the suburbs are generally broad and straight; but some of them are in wet weather dirty and muddy. The thoroughfares in the city proper are, on the contrary, uniformly clean, and well paved. The houses, both in the city and suburbs, are in general huge edifices, and, as in Paris, are built around court-yards, and occupied by many different families. Some of these dwellings are of enormous extent, and quite towns in themselves. Prince Esterhazy has one comprising 150 different sets of apartments, and yielding a revenue of 1,600*l.* to 2,000*l.* a year; and one belonging to the Stahrenberg family is said to be inhabited by 2,000 persons, and to produce a rental of 4,000*l.* a year. The Burgher Spital, formerly a hospital for citizens, was converted by Joseph II. into a dwelling-house: it is 6 stories high, has 10 courts and 20 staircases, and several other houses are of equally colossal dimensions. No city in Europe has so large a number of resident nobility as Vienna: 24 families of princes, 70 of counts, and 60 of barons make it their home for the greater part of the year. These nobles may perhaps have fortunes of from 100,000 to 500,000 florins a year, and several, as Princes Esterhazy and Lichtenstein, considerably more. Here also many private gentlemen spend 50,000 florins a year; and, with the exception of those of London, the citizens of Vienna are the richest in the world. Berlin and Dresden may perhaps have more cornices, pillars, and handsome public buildings, and in Munich and Paris these may have a more imposing effect, but in none of these capitals are there so many remarkable

sive private edifices. The Herrengasse and other streets near the imperial residence are full of palaces of the higher nobility. These, as in London, frequently extend along narrow thoroughfares, and are not distinguished from humbler residences except by their greater size and elevation; but their interiors are sumptuous.

Nearly all the so-called squares of Vienna are within the city. They are irregular, and comparatively small open spaces, none being so large as Waterloo Place; the cathedral stands in the centre of St. Stephen's Platz, and the Graben is a great thoroughfare, and may be looked upon as the Charing Cross or Mansion House Place of Vienna. Most of these open spaces are ornamented with one or more monuments, or fountains. These however, we think, are not always in good taste. In the Joseph Platz is a fine equestrian statue of Joseph II., by Zanner. The emperor whose likeness is said to be very striking, is attired in the Roman costume, and crowned with laurel; with one hand he curbs the impetuosity of his steed, and the other he extends to his people. The statue stands on an elevated pedestal of granite, bearing the inscription, '*Saluti publicæ vixit non diu sed totus.*' The pedestal, with its attendant pilasters, are adorned with medallions, representing, not the remarkable events of the emperor's life, but his travels. The statue was erected by the Emperor Francis II. In her bridges Vienna is immeasurably behind London and Paris, having none worth notice. The Danube is here nowhere much more than 60 yards across, being also a sluggish and muddy, though a navigable stream. The Wien is little better than a ditch. The drainage of the town is effected by good underground sewers.

Public Buildings.—The chief of these is the cathedral of St. Stephen, almost in the centre of the city, and from which the principal thoroughfares diverge. It is an elegant Gothic building, ranking in elevation and richness of architecture with the cathedrals of Strasburg and Antwerp. Its length is 350 ft., and its greatest breadth 220 ft. Flanking its great W. doorway are two towers, the remains of the original church, constructed in 1163; and at the angles of this front are two magnificent piles of a similar kind, though only the most southerly has been finished. This tower and spire is 450 ft. in height, or barely 16 ft. lower than that of Strasburg; it has a bell weighing 357½ cwt., cast from cannon taken from the Turks, and declines towards the N. about 3 ft. from the perpendicular. The exterior of the cathedral has a good deal of rich tracery. Within are some good wooden carving, a few good pictures, the monuments of Prince Eugene, the Emperor Frederick III., and a gorgeous chapel of the Lichtenstein family; but, on the whole, its interior is but little decorated. A crypt beneath it served for three centuries as the burial-place of the imperial family: at present, however, only parts of their viscera are preserved here, their hearts being deposited in the Augustine church, and the rest of their bodies in that of the Capuchins. The church of the Augustines is one of the handsomest in Vienna, and contains the monument of the Archduchess Christine, one of the finest works of Canova, besides those of Leopold II., Daun, and Von Swieten. The church of St. Charles Borromeo is an imposing edifice, in the Byzantine style; Metastasio is buried in that of St. Michael, and the Carmelite church has some fine stained glass. Vienna has, in all, above 60 churches, a

The Burg, or imperial palace, occupies a large extent of ground in the SW. quarter of the city. It is externally a gloomy and shapeless congeries of buildings, erected from the 14th to the 17th century, on a par, in point of architecture, with St. James's. It comprises extensive suites of rooms, though these, in the simplicity of their furniture and decorations, show the unostentatious habits of the Austrian princes. The state apartments, with their ancient gilding and faded velvet hangings, remain in the same condition as in the time of Maria Theresa. But the palace has some fine collections in art and science. The imperial library, which comprises 284,000 printed volumes, and 16,000 MSS., is placed in a handsome edifice built for the emperor Charles VI., whose statue, with that of many other Austrian monarchs, is placed in the centre of the grand hall, an apartment 240 ft. in length, by 45 in width and 62 in height, with a fine dome rising 80 ft. above the ceiling. The library increases by about 3,500 vols. a year, a copy of every work published in the empire being deposited here; besides which, a fund of nearly 2,000*l.* a year is spent in the purchase of new works. This library is open to the public without introduction for five hours a day. It has, among other curiosities, an act of the Roman senate prohibiting the *bacchanalia*, engraved on bronze, and bearing date A. U. C. 567 (or B. C. 186); the 5th decade of Livy, a unique MS.; the Peutingerian Table, a military map of the Roman empire in the 4th century; several MSS. of succeeding centuries, the earliest book printed with a date, and the MSS. of the '*Jerusalem Liberata.*' Here also are collections of music and engravings, the last comprising about 300,000 pieces. The museum of antiquities comprises a cabinet of medals, second only to that of Paris, and an unrivalled collection of intaglios and cameos. One of the latter, representing the apotheosis of Augustus on an enormous sardonix, is supposed to be the finest existing, and the coins and medals amount to 80,000, including 18,000 Greek and 23,000 Roman. The collection of ancient sculpture is far inferior to the collections of either Dresden or Munich; but there are excellent museums of natural history and botany, and the cabinet of minerals surpasses every other in Europe. Here are also Egyptian and Brazilian museums, a good collection of Greek vases, and the imperial jewel-office, in which, including a number of relics, are the Austrian and Hungarian regalia, the Florentine diamond, the iron crown and sceptre of Charlemagne, and the sword of Tamerlane.

The Belvidere palace is appropriated to the Ambras museum, and to one of the finest collections of paintings in Europe, being especially rich in works of the Flemish and German schools. The Ambras museum, formed late in the 16th century, includes, besides other curiosities, a most interesting historical collection of armour. The paintings in the imperial gallery are classed in separate rooms, according to schools. In those of the Italian schools are the famous '*Ecce Homo*' of Titian, formerly belonging to Charles I. of England; a superb '*Holy Family*' by Raphael; many other pictures by these artists, and by P. Veronese, the Caracci, and S. Rosa. In those of the Flemish school are three masterpieces by Rubens; '*St. Ignatius driving out Evil Spirits*,' '*St. Ildefonso*,' '*St. Ambrosius closing the Church Door at Milan against the Emperor Theodosius*,' some of the best works of Rembrandt and Vandyck, and pictures by Teniers, Cuyp, and G. Dow. Other

comparative series of Italian paintings from the 14th to the 19th century. In the Belvidere gallery is the mosaic copy of Da Vinci's 'Last Supper,' for which Napoleon I. engaged to pay 15,000 zecchinos, and which was afterwards bought for the same sum by the late emperor Francis II. 'At Dresden,' says a traveller, 'the gallery comprises perhaps the grandest *ensemble* in Europe, but is so neglected, so involved in gloom and dirt, as to afford too often a feeling more akin to pain than to pleasure. At Berlin the condition, care, and arrangement are perfect, but the works themselves are rarely first-rate specimens. The gallery of Vienna is good alike in intrinsic excellence, in order, and in condition. Of the museums generally, as, indeed, of most of the institutions under the Austrian government, the high and eminent excellence is their admirable adaptation to practical utility. In those of other countries we have seen articles of greater individual rarity; entire assemblages of certain branches, more copious and complete; but in no one were the various objects, to our apprehension, so ably and lucidly arranged, labelled, described, and exhibited, as at Vienna: and this, too, in a city where space and light are so defective. They are fully exhibited to the public, during a convenient number of hours, and the student has ample opportunity of following up his researches therein, in connection with lectures gratuitously afforded on the principal branches of science.'

The imperial arsenal has one of the richest armouries in Europe. In the upper rooms 150,000 stand of arms are kept; and, besides a large store of weapons and armour of different dates, there are the buff coat worn by Gustavus Adolphus at the battle of Lutzen, the arms of Marlborough, Eugene, Stahremberg, and Montecuculi, numerous standards, and the enormous chain thrown across the Danube by the Turks in 1529. The city arsenal is a fine building, constructed by the citizens at their own expense, and has, with many curiosities similar to the above, arms sufficient for 25,000 civic guards. The imperial riding-school is also a handsome edifice by Fischer of Erlach, but lost among the buildings of the palace. The royal stabling, in the suburbs facing the Burg-thor, is a noble palace appropriated to the royal Hungarian guard.

Vienna has five good theatres; the principal are, the Hof-theatre attached to the palace, and that at the Kärnthner-thor (Carinthian-gate). The first is devoted solely to the performance of the regular German drama; and, though not the largest, is by far the finest theatre in Vienna. It is both clean and well lighted, and is said somewhat to resemble Drury Lane. The acting here is at least equal to that of Berlin; and the performers have, after ten years' service, a handsome pension settled on them for life by the government, with an annuity after their death for their widows. The Kärnthner-thor is the opera-house of Vienna, and the singers and orchestra are unsurpassed in Germany. This house is very large, having six complete rows of boxes and a half circle next the pit; but the largest theatre is one on the Wien, appropriated to equestrian pieces. The really national theatre of the Viennese is the Beym Casperl, the Leopoldstadt. This theatre, the Adelphi or Ambigu Comique of Vienna, is appropriated to farces, and is the arena on which the national character is painted in the most lively colours and broadest manner. Here one circumstance is noticeable, as indicative of the power of 'the million,' even in Austria. The police, though exceedingly strict in the regular theatres, are said to *wink hard* at the political jokes that are fre-

quently cracked on this stage; while the pulse of the public is not unfrequently felt here, by somewhat the same means as the old Council of Ten used to adopt at Venice, through the tricks and colloquies of Punchinello.

Schools, Libraries, and Galleries.—Vienna has a university, founded in 1237, but which was wholly remodelled by Von Swieten in the time of Maria Theresa. It is celebrated on the Continent as a school of medicine, and is probably attended by a greater number of students than any other German university, except that of Berlin. There are between 70 and 80 professors, all of whom are paid by government, and are neither permitted to receive fees on their own account, nor to give private lessons. The theological, surgical, and veterinary courses are delivered gratuitously; but the student has to pay a fee of 18 flor. (about 1*l.* 11*s.* 6*d.*) for attendance on the lectures in philosophy, and of 30 flor. (2*l.* 12*s.* 6*d.*) for attending those in medicine and jurisprudence. The whole amount of the money thus paid for tuition during the session is expended in stipends to indigent students, and divided among them, without reference to their religious creeds, in allowances varying from 50 to 150 flor. (4*l.* 10*s.* to 18*l.* 10*s.*). Nearly all the lectures are delivered in the German language. The university has a library of above 100,000 vols., and 150*l.* a year is expended in the purchase of new works; and it receives, gratis, a copy of all works printed in Austria. An observatory and a botanic garden are attached to this establishment.

The Polytechnic Institute, a handsome structure facing the glacis, was founded by the Emperor Francis in 1816, to afford instruction in the practical sciences, arts, and commerce; and has about 750 pupils and 35 masters. Besides the ordinary branches of knowledge, the pupils are taught the history of commerce, the knowledge of merchandise, mercantile law, and correspondence, natural history and chemistry as applied to commerce, drawing, and mathematics; for which instruction the pupils pay only 3 fl. a month, and, for a small extra sum, are taught Latin, English, French, and Italian. Among other collections, this school has a museum of the products of arts and manufactures, both Austrian and foreign, and a valuable library. The Theresianum, for the sons of the aristocracy, and the normal school of St. Anne, were both established by Maria Theresa. The former was suppressed by Joseph II., but restored by Francis; and it has now a library of 30,000 printed vols., besides MSS. and pamphlets. Joseph II. established both the Oriental Academy and the Josephinum; the latter, an institution for the education of army surgeons, which has attached to it a hospital capable of receiving 1,200 patients, and a collection of anatomical figures in wax, by Fontana. Besides these establishments, Vienna has a special seminary for the education of the secular clergy, a Protestant seminary, founded in 1821; 6 military colleges, with nearly 1,000, and 49 minor establishments for military education, with nearly 3,000 pupils; an academy of the fine arts for about 1,300, and a musical academy for 200 students; besides about 60 inferior public schools. In addition to the libraries already mentioned, the Archduke Charles has one of 25,000 vols., Prince Lichtenstein of 40,000, Prince Metternich of 23,000, Prince Esterhazy of 20,000, exclusive of many inferior collections. But, with all these appliances for knowledge, Vienna cannot be considered so much a resort of learning as of the fine arts. In painting she is, perhaps, the richest capital of Europe. The gallery of Prince Lichtenstein consists of 25 splendid

apartments, filled with exquisite originals of the Italian, Flemish, French, and Dutch masters, including chefs d'œuvre of Raphael, Guido, Rubens, Vandyck, Domenichino, Guercino, Claude, S. Rosa, and Carlo Dolce. The Esterhazy gallery contains upwards of 600 pictures, of which 54 are by Spanish masters, whose works are rarely found out of Spain; with a collection of sculptures, including works by Canova and Thorwaldsen; and 50,000 engravings. Counts Czernin, Schönborn, Harrach, Lemberg, and many other noblemen, have collections of choice paintings; and in the palace of the Archduke Charles is a collection of 160,000 engravings. The foregoing galleries are all open to the public at stated times.

In statuary, also (though not in public statues of celebrated men), Vienna is very rich. Canova's group of Theseus killing the Centaur deserves especial mention. It was originally intended by Napoleon I. to surmount the grand arch at Milan, but is now placed in the Theseum, a Doric temple, on the Volksgarten, in imitation of the temple of Theseus at Athens. This group is of Carrara marble. The hero is in the act of grasping with his left hand the throat of the Centaur; while his right arm, raised behind his helmeted head, clenches the club with which he prepares to inflict the fatal blow. The whole character of the group is in Canova's most effective style.

Hospitals and other Charities.—Few capitals are so abundantly furnished with charitable institutions as Vienna. Many of the principal, as the general hospital, house of invalids, and deaf and dumb asylum, were founded by Joseph II. The general hospital is a vast building, ranged around 7 quadrangles, having 2,000 beds. It is said to receive annually from 10,000 to 16,000 patients. It partly answers the purpose of a sanatorium, there being separate bed-rooms, which, with medical attendance, and every comfort necessary for an invalid, are within the reach of persons of limited income, on the payment of a small sum daily. The hospital of the Charitable Brethren, supported partly by voluntary contributions, is a monastic establishment, but open equally to Jews, Turks, and Christians of all persuasions. The house of invalids is similar in its kind to Chelsea Hospital, having been founded for 800 old soldiers. In its great hall are two large pictures of the Battles of Leipsic and Aspern. The Deaf and Dumb Asylum is well conducted; and those among the pupils who evince intelligence are often afterwards employed in state affairs requiring secrecy. There are schools for the blind and a lunatic asylum, which is, however, said not to be so well conducted as most of the other public establishments. Attached to the General Hospital are the *maison d'accouchement* and foundling hospital. In the former of these not even the name of the applicant is demanded; she may enter veiled or masked, and remain incog. the whole time she continues in the house; she has merely to deliver a sealed paper to the superintendent, containing her name and real address, that, in the event of death ensuing, her relations may be apprised of her fate. The person who brings a child to the foundling hospital receives a ticket, by presenting which the child may, at any time, be reclaimed: if it be not taken away, it is, at the proper age, brought up to some employment.

Commerce and Trade.—Vienna is the great emporium of the Austrian provs. N. of the Alps, and important depôt for the interchange of goods between E. and W. Europe. It has extensive establishments for cotton printing, and for the manufacture of silks and velvets, and of cotton

amongst the most celebrated on the Continent, and it has an imperial cannon foundry, and a manufacture of small arms, said to employ 500 workmen. Cutlery, watches, and jewellery, bronze and other metallic goods, Meerschaum pipes, musical instruments, paper, chemical products, gloves, leather, hosiery, chocolate, and liqueurs, are among the other principal products: it has several large printers and music engravers. Many of the most wealthy mercantile houses belong to Greeks. The national bank of Vienna, established during the Seven Years' War, was reconstituted in 1815. It has the exclusive privilege of issuing notes in the Austrian empire, and has numerous branches in all the more important towns of the empire. The bank advanced large sums to the government during the war with Prussia, in the summer of 1866, in consequence of which its one and five florin notes were declared to be state-notes, with forced currency. The total amount of these notes in circulation, in September, 1866, was estimated at 500 million florins.

The hotels are of two classes: living in those of first-rate excellence costs about one-third more than in Paris; but those of the second class are very good of their kind. Lodgings are twice as dear in the city as in the suburbs, where a room tolerably furnished may be had for 6 florins a month. The cafés of this city are not decorated with the same splendour as those of Paris, but they are quite as much frequented, being resorted to in the evenings by both sexes of the middle classes, and at other times by gentlemen to play at billiards. Vienna is well supplied with provisions of all kinds, which are generally cheap. House rent is said to be lower than in Paris; servants' wages are much less; furniture is still cheaper; and a pair of good Hungarian carriage horses, the keep of which will cost about 30% a year, may be bought for 40%. 'No town,' says an English traveller, 'exhibits such an appearance of people living amidst plenty, such an absence of uneasy classes, and of anything that can represent poverty. The hackney coaches are as neat, clean, and showy as private carriages; the horses are generally in excellent condition. The shops, though in such narrow streets, are as dashing as those of London or Paris, and most of them have signs, with paintings almost worthy of museums. The booksellers' and picture shops are numerous and large: and, besides the literature of every state in Germany, you may find many popular books and the principal engravings published in England and France.'

Parks and Amusements.—The principal amusements of the Viennese are music, dancing, the theatres, and frequenting the Prater and other fine promenades which encircle the city. The Prater, the Hyde Park or Champs Elysées of this capital, is handsomer than either, and may be considered the finest public park in Europe. It is nearly 4 m. in length by half as much in breadth, being enclosed between two arms of the Danube. Besides the fashionable drives, the Prater contains a great number of coffee and ice houses, pavilions, and shows, and is generally filled with a throng of people, particularly on Sundays and holidays. The glacis is studded in a similar manner with places of entertainment, and the Augarten and Brigittenau, both N. of the Danube, and the Volksgarten, within the city, are promenades in much the same style. The dancing saloons, or public ball rooms, are not in general what can be called fashionable places of amusement, though the imperial family and higher nobility attend the balls in the Redoutensaal at the carnival and other times. They

are, however, resorted to by great numbers of the middle and also of the upper classes, and one of the principal, the Apollo Saal, can accommodate with ease 10,000 persons. The music here is of a superior order, celebrated bands being constantly engaged. A traveller says, 'The Viennese take to themselves the reputation of being the most musical public in Europe, and this is the only part of their character about which they display much jealousy or anxiety. So long as it is granted that they can produce among their citizens a greater number of decent performers on the violin or piano than any other capital, they have no earthly objection to have it said that they can likewise produce a greater number of blockheads and debauchees.'

Vienna has acquired the character of being the most dissolute capital in Europe. But without stopping to enquire whether it be entitled to this distinction, it is, at all events, a most agreeable place for a stranger. A liveliness and *bonhomie* pervades society; in bustle and activity Vienna rivals London and Paris; and the pursuit of pleasure appears one of the main occupations of the great mass of the inhabs. The peace of the city is preserved with the utmost care. The arrivals, departures, and residences of strangers are carefully noted; passports are strictly examined, and great care is taken that visitors shall show that they have the means of paying their way. With residents, however, the police interfere but little, and never obtrusively. Among the drawbacks on a residence here are, the furious driving in the crowded thoroughfares, through which pedestrians have to wind their way among heaps of fuel, the hewing of which is incessantly carried on before the doors of the houses; the great variability of the climate, and the indifference of the water.

Vienna is an archbishop's see, the residence of the Protestant superintendent for all the SW. provs. of the empire, the seat of the high judicial tribunals, and central bureaux of the Austrian dom., of the court of appeal for the archduchy of Austria, and the provincial government of the prov. below the Enns. Though not in general famous as a seat of literature, it has, among many other associations, a literary society, of which Von Hammer, the Orientalist, the poet Grillparzer, the historian Mailath, the novelist Caroline Pichler, the mineralogist Mohs, Balbi, and other celebrities, are, or were, members. The upper classes speak English, French, and Italian almost as well as their native language.

The *environs* are picturesque, but the roads around are very bad. About 2 m. from the city is Schönbrunn, the favourite summer residence of the emperor. It stands in a large park stocked with deer and game of all kinds. The palace, built by Maria Theresa, is a vast monotonous pile, but richly furnished, and possesses many interesting portraits of the imperial family. It was twice occupied by Napoleon I.; the treaty of Schönbrunn was signed in it in 1809, and here the Duke of Reichstadt, son of Napoleon, died in 1832. In the grounds are the Gloriette, a large columnar temple, from which a fine view is obtained; a menagerie, a splendid botanic conservatory and gardens, with eating-houses, music, and dancing-rooms, for the public. Not far from the Schönbrunn are Laxenburg, Brühl, and Baden, frequented by pleasure parties from the metropolis, in much the same way as Richmond, Greenwich, or St. Cloud.

History.—Vindobona was remarkable in antiquity as the place where Marcus Aurelius expired. It was successively taken by the Goths and the Huns, and subsequently by Charlemagne, who

placed it under the government of the margraves of the E. part of his dom., thence called Oesterreich, or the Eastern-realm. The margraves, afterwards dukes, held Vienna till the middle of the 13th century, soon after which it came into the possession of the house of Hapsburg. In 1484, it was taken by the Hungarians, whose king, Mathias, made it the seat of his court. Since the time of Maximilian I., it has been the usual residence of the archdukes of Austria and emperors of Germany. It was besieged by the Turks in 1529 and 1683: on the first occasion it was relieved by Charles V., and on the second by John Sobieski of Poland, who totally defeated the enemy beneath its walls. In 1619 it was unsuccessfully blockaded by the Bohemian Protestants. In 1797 it was threatened by the French, but its siege was averted by the peace of Leoben. The French took it, however, in 1806 and 1809. The famous congress which parcelled out Europe into its new divisions sat here from the 3d Nov. 1814, to the 9th June, 1815.

On the 6th Oct. 1848, a formidable insurrection broke out in Vienna. One of the ministers, Count Latour, having been assassinated, and the others compelled to seek their safety in flight, the town fell into the possession of the insurgents. But the revolutionary spirit did not extend to the other portions of Austria Proper; and the army having continued faithful to its sovereign, the city was reduced to obedience on the 31st Oct., and the insurrection suppressed.

VIENNE, a dép. of France, reg. W., principally between the 46th and 47th degs. of N. lat., and long. 0° and 1° E., having N. Indre-et-Loire, E. Indre, SE. Haute-Vienne, S. Charente, and W. Deux Sevres. Area, 697,036 hectares; pop. 322,028 in 1861. It derives its name from the river Vienne, an. *Vigenna*, which rises in the dép. Creuse, and after traversing Haute-Vienne, a part of Charente, Vienne, and Indre-et-Loire, at first in a W. and afterwards in a N. direction, enters the Loire after a lengthened course. Its principal affluents are the Thorison, Issoire, and Creuse from the E., and the Briançon, Vaire, and Clain, from the S. and W. Limoges Consolens, Chatellerault, Chinon, are on its banks. Nearly all the other rivers of the dép. are tributaries of the Vienne or of its affluents. Surface mostly level, but in the S. a chain of heights separates the basin of the Loire from that of the Charente. The soil in the level ground is moderately good, but in the S. it is thin and chalky. The arable lands are estimated to comprise 413,131 hectares; pastures, 42,732 do.; vineyards, 28,744 do.; woods, 80,372 do.; and heaths and wastes, 75,167 do. Wheat and oats are the grains principally cultivated; rye and millet are raised for home consumption; but in years of scarcity chestnuts are a principal resource of the pop. From 500,000 to 700,000 hectol. wine are annually produced; but, on the whole, its quality is inferior, and large quantities are converted into *eau de vie*, frequently of great excellence. The white wines are the most extensively produced. A good many cattle are reared, and the sheep in some of the cantons are said to be of a superior kind: the produce of wool is estimated at 400,000 kilogr. a year. About 45,000 hogs are said to be annually exported from this dép., by way of the Atlantic ports. Bees and poultry are extensively reared. The vicinity of Chatellerault produces very superior lithographic stone; and marble, whetstone, and millstone are found in other parts of the dép. Some iron mines are wrought, and there are numerous iron forges. Chatellerault has rather extensive manufactures of fire-arms; and cutlery, lace, coarse woollen

cloths and woollen yarn, paper, furs and skins, biscuits, beer, and vinegar, are among the other goods made in Vienne. This *dép.* is divided into 5 arronds.; chief towns, Poitiers, the cap., Châtellerault, Civray, Loudon, and Montmorillon.

VIENNE (an. *Vienna*), a town of France, *dép.* Isère, cap. arrond. on the Rhone, where it is joined by the Gere, the former being here crossed by a suspension bridge, 16 m. S. by E. Lyons, on the railway from Lyons to Marseilles. Pop. 19,559 in 1861. The town, situated under a high cliff, with the castle upon its summit, is a striking and beautiful object in descending the river; and after passing it, there is a perfect union of the beautiful and the picturesque in its scenery. A handsome quay stretches along the Rhone; and the lower part of the town, on the high road between Lyons and Marseilles, has broad and well-built streets; but the rest of the thoroughfares, along the narrow valley of the Gere, and up steep declivities, are ill laid out, and lined generally with mean houses.

Vienne has several remains of Roman buildings and other antiquities. In the centre of the town is a temple anciently dedicated to Augustus and Livia, having a good deal of resemblance to the Maison Carrée at Nîmes, though not in such good preservation. It has been used for a church, a club-house, and a tribunal of commerce, and is now appropriated to a museum of antiquities. Outside the town, and in much better preservation, is a pyramidal monument nearly 45 ft. in height, and apparently a tomb. The traces of a bridge across the Rhone, an amphitheatre, a naumachia, and theatre also exist. Here, also, are several middle-age antiquities, among which is the cathedral, considered one of the best Gothic edifices in France. It stands in an elevated position; its grand entrance is ornamented with sculptures, and flanked by two high towers; the roof is supported by 48 lofty columns in the interior; the galleries have Gothic balustrades; and it has a fine monument of one of the archbishops of Vienne. The church of an ancient abbey is also worth notice. The other principal buildings are the cavalry barracks, college, hospital, workhouse, corn exchange, abattoir, and public library with 14,000 vols.

Vienne has manufactures of woollen cloths, pasteboard, iron and copper plates; and near it are some argentiferous lead mines producing about 1,500 quintals a year of metal. It was anciently a city of consequence, having been successively the cap. of the Allobroges; of its prov. in Narbonnese Gaul, under the Romans; and of the first and second kingdoms of Burgundy; and in the early ages of Christianity it was the see of the archbishop, primate of Gaul. It was united with Dauphiny to the French dominions by Louis XI. The famous council, held in 1311, which abolished the order of the Templars, met in this town.

VIENNE (HAUTE) a *dép.* of France, reg. W., between lat. 45° 25' and 46° 25' N., and long. 0° 35' and 1° 45' E., having NW. and N. Vienne and Indre; E. Creuse; SE. Corrèze; SW. Dordogne; and W. Charente. Area, 551,657 hectares; pop. 319,595 in 1861. The surface is hilly, particularly in the E., and the mean elevation of the *dép.* is estimated at between 1,800 and 1,900 ft. above the level of the sea. The rivers, the principal of which are the Vienne (see previous art.) and the Gartempe, with their tributaries, have generally a W. direction. The soil, being mostly composed of the debris of granite, and other primary rocks, is, in general, of inferior fertility. The arable lands are estimated to comprise 213,354 hectares; pastures,

wastes, 93,244 do. Wheat is but little grown; its place being supplied by rye, buckwheat, chesnuts, and potatoes. Very little wine is grown. The pasture lands are comparatively good; and the sheep in the *dép.* are estimated at nearly 610,000 head, and the cattle at 148,000 do. The wool produced in the *dép.* is, however, of inferior quality. Rural industry of all kinds is very backward. The fine potter's clay at St. Yriex is the most valuable of the mineral products: there is a tin mine at Vautry, the only place in France at which that metal is found; and copper, iron, lead, antimony, manganese, and coal are met with in greater or less abundance. The manufacture of earthenware is the most important: and among its other products are iron and copper plates, cutlery, and other steel articles, nails, linen, woollen and cotton yarn, coarse woollen cloths, paper, leather hats, and wooden shoes. It is estimated that 15,000 inhabs. of this *dép.* migrate annually as masons, sawyers, and carpenters, into the *déps.* Seine and Rhone, and the arsenals on the W. coast. Haute-Vienne is divided into 4 arronds.; chief towns, Limoges, the cap., Bellac, Rochechouart, and St. Yriex.

VIERZON-VILLE, a town of France, *dép.* Cher, cap. cant., on the Evre, near its junction with the Cher, in a fertile plain, 19 m. NW. Bourges. Pop. 7,740 in 1861. The town consists principally of one street, which would be among the best in France, if furnished with footways. Its houses are mostly slated. It has manufactures of woollen cloths, earthenware, and iron ware. Its castle was destroyed by Richard I. of England, in 1192; and, in 1856, it was pillaged by the army of the Black Prince.

VIGAN (LE), a town of France, *dép.* Gard, cap. arrond. on the Arre, a tributary of the Herault, 40 m. WNW. Nîmes. Pop. 5,376 in 1861. Le Vigan is the pleasantest and most healthy of all the small towns in the Cevennes, and one to which the opulent inhabs. of Nîmes and Montpellier resort during the heats of summer. In one of its squares has been erected a fine bronze statue of the Chevalier d'Assas, a native of the town. It has manufactures of cotton and silk hosiery, cotton yarn, leather, and paper.

VIGEVANO, a town of N. Italy, prov. Novara, on the Mora, near the Ticino, and 14 m. SSE. Novara, on the railway from Novara to Turin. Pop. 17,637 in 1862. Vigevano stands elevated, and enjoys a salubrious climate. It is enclosed by walls, has an old castle, a cathedral, which stands in a square surrounded on three sides by arcades, numerous convents, a hospital, government pawnbank, a communal college, and a sanatorium, established in 1832. Near it is a large and handsome Dominican convent. The town has manufactures of silk stuffs, hats, soap, and macaroni; 2 annual fairs of 8 days each, and markets twice a week. This town gave birth to Francis Sforza II., duke of Milan, and is much indebted to the munificence of the Sforza family. Under the French it was the cap. of an arrond., in the *dép.* of Agogna.

VILLA-REAL, a town of Spain, in Valencia, prov. Castellon de la Plana, on the Mijares, here crossed by a fine bridge of 13 arches, within about 4 m. of the sea, and 33 m. NNE. Valencia, on the railway from Valencia to Barcelona. Pop. 8,665 in 1857. The town originated in a country palace of James I., king of Aragon. It has one regular and well built street; several religious edifices, a prison, a large suburb, and some silk and woollen manufactures, and distilleries. It was formerly fortified, and in the War of the Succession was garrisoned for the Archduke Charles; but having been taken by the troops of Philip V., in 1706,

were destroyed, and great part of its inhabs. put to the sword.

The town of the same name in Portugal, prov. Tras-os-Montes, cap. Comarca, had 2,230 inhabs. in 1858.

VILLA-RICA, a town of Brazil, cap. of the prov. of Minas-Geraes, on the Ouro-preto, by which it is intersected, and which is here crossed by four stone bridges, 190 m. NNW. Rio Janeiro. Pop. 10,300 in 1862. The town occupies an elevated site, but it has no very striking approach; nor, on a nearer view, does it present to the eye of a traveller any object corresponding with the grandeur of its name. It is situated on the declivity of a high mountain, forming part of an immense chain. Most of the streets range in parallel rows along the side of the mountain, being crossed by others leading up the acclivity. These have numerous public fountains, and the town generally is admirably supplied with water, which is conveniently conducted into almost every house. The streets are ill-paved; but there are many good houses two stories in height, built of stone, tiled, and whitewashed. The governor's residence, the town-hall, 2 par. churches, numerous chapels, the mint, college, and theatre, were, a few years ago, the principal edifices. Some of these are superior to the public buildings in most other parts of Brazil. The governor's house commands a view of nearly the whole town; and in its front is an open space surrounded by a sort of parapet, on which a few brass swivels are mounted. Several of the churches are richly ornamented. The mint is in the lower part of the town, attached to the treasury and custom-house. The climate of Villa-Rica, owing to its elevated situation, is very agreeable; the usual range of the thermometer is from 64° to 80° Fah. in summer, and from 48° to 70° in winter. Thunder-storms, though common, are not violent. The gardens here, which extend in raised terraces along the side of the mountain, produce excellent kitchen vegetables; but, beyond these, the vicinity of the town, notwithstanding its fertility, is wholly uncultivated, and the cattle and other stock are allowed to pasture at random. The markets are accordingly ill supplied; and when Mawe visited the country, most sorts of provisions and vegetables brought a very high price.

The inhabs. are chiefly interested in mining speculations, Villa-Rica being the head-quarters of the gold-mining district of Brazil. The metal, found in the mountain on which the town is built, is imbedded in a matrix of slaty clay schist resting on granite, gneiss, or sandstone. Bars of this valuable product, with precious stones, cotton, hides, marmalade, and cheese, are sent to Rio, where they are exchanged for slaves, manufactured goods, wines, and hams. Owing, however, to the falling off in the productiveness of the mines, this trade is now much less considerable than formerly. The goldsmith trade is prohibited in Villa-Rica, but almost all other handicrafts are carried on. There are also manufactures of gunpowder, hats, and pottery. The inhabs. generally depend on mining; and in consequence of the uncertain, hazardous nature of their employment, which has greatly declined, they are very generally idle, poor, and dissolute.

VILLEFRANCHE, a town of France, dép. Aveyron, cap. arrond., on the Aveyron, 26 m. W. Rhodéz. Pop. 2,911 in 1861. The town is well built: four parallel thoroughfares divide it into nine parts, besides which it has several suburbs interspersed with plantations. The old collegiate church, and the hospital, formerly a conventual building, are remarkable specimens of

Gothic architecture. The public establishments comprise a college, a public library, museum, and club, or subscription rooms. The principal manufactures consist of linens and copper wares; it has, also, a considerable trade in corn, cattle, and other rural produce, and 12 annual fairs.

Another town of the same name is the cap. of an arrond. in the dép. of the Rhone, on the Soane, 17 m. NNW. Lyons. Pop. 11,750 in 1861. It consists chiefly of one very long and wide street, is well built, and has agreeable environs. Its manufactures consist principally of linen fabrics, cotton, thread, and leather, in which articles, with the addition of wine, cattle, hemp, flax, and hempen cloths, it has a brisk trade with other towns in the S. of France. Near it are some lead mines, which were wrought under the Romans.

VILLENA (an. *Turbula* or *Arbacula*), a town of Spain, prov. Murcia, cap. distr., in a fine plain 32 m. NW. Alicante, on the railway from Madrid to Alicante. Pop. 8,350 in 1857. Villena has its castle and huerta, and is a place of some size, with several convents and churches. The vine is extensively grown upon the lower acclivities of the neighbouring sierra, and is almost all converted into brandy. Villena gives title to a marquis, whose palace, a town-hall, 2 churches, many chapels and convents, a hospital, and some barracks are its principal edifices. It has some soap factories; and, in the neighbouring marshes, a good deal of salt is made.

VINCENNES, a town of France, dép. Seine, cap. cant., on the road to Coulommiers, within a short distance of Paris. Pop. 18,414 in 1861. Vincennes owes its origin to Philip Augustus, who surrounded the wood of its name with walls, and built at one of its extremities a royal residence, on the site of which, in 1380, the present castle was erected. This castle continued to be a place of resort for the French kings till the time of Louis XI., when it was made a state prison, a destination which it retained, with little intermission, till 1784, the great Condé, Diderot, and Mirabeau having been among the number of those confined within its walls. Under Napoleon I., it again served the same purpose; and here, on the 21st March, 1804, the Duke d'Enghien was shot. The castle of Vincennes is of an oblong form, about 360 yards in length by 210 in breadth, surrounded by dry ditches, and entered by two drawbridges. The keep is a square tower, five stories in height, with four turrets, and a balcony outside the fourth story. The chapel, founded by Charles V., in 1379, but mostly rebuilt under his successors, is a rich Gothic edifice, with some fine stained glass *cour Imperiale*, is surrounded by modern buildings, in which are some well furnished apartments, and a large collection of arms. In the fosse, a plain column of granite, on a foot of black marble, and bearing the inscription '*Hic cecidit*,' points out the spot where the Duke d'Enghien met his fate. The wood of Vincennes, comprising about 1,500 acres, is, with the town, a good deal resorted to by the Parisians on holidays, particularly the *fête patronale*, on the 15th of Aug.

VINCENT (ST.), one of the W. India islands, belonging to Great Britain, in the centre of the Windward group, about lat. 13° 10' N., and long. 60° 37' W., 21 m. SSW. St. Lucia, and 108 m. W. Barbadoes. It is of an elliptical shape, 17 m. in length, and from 7 to 8 m. in mean breadth. Area, 131 sq. m.; pop. 31,755 in 1861, of whom 2,347 whites, 22,855 black and 6,553 'coloured' persons. The centre of the island is occupied by a lofty range of mountains, which in some parts attain the height of 4,000 ft.; but the mountains decline rapidly towards the sea; and there are

some considerable and well-watered valleys, the soil of which, consisting of a fine black mould of sand and clay, is especially adapted for the culture of sugar. In the upper grounds the soil is light and sandy. St. Vincent is of volcanic origin, and a tremendous eruption of one of its mountains, in 1812, occasioned great mischief. The mountains are clothed from their base to their summits with immense forest trees; but the ground having everywhere the advantage of a gradual slope, and there being little jungle or brush-wood, ventilation is not impeded. The valleys also are sufficiently wide, and free from excessive vegetation, to give a healthy character even to the uncultivated portion of the island; and there is little swampy ground, except in a few places near the sea. Only about one-third part of its surface is under cultivation. The atmosphere is generally humid, and the dews heavy; but, notwithstanding, St. Vincent is considered one of the most healthy of the W. India islands.

The chief imports are British manufactures, while the exports comprise sugar, molasses, rum, coffee, and cocoa. The total value of imports and exports, in the year 1860-62, was as follows:

| | 1860 | 1861 | 1862 |
|-------------|---------|---------|---------|
| | £ | £ | £ |
| Imports . . | 150,843 | 125,906 | 140,289 |
| Exports . . | 172,265 | 183,676 | 143,323 |

The government is vested in a governor, a council of 12, and an assembly of 19 mems. Representatives of the House of Assembly must have an income of 300*l.* a year, or, if representing the town of Kingston, a house in that town of the yearly value of 100*l.* Electors must possess a freehold of 10 acres, worth 20*l.* a year in Kingston, or 10*l.* a year elsewhere. The public revenue, in 1862, amounted to 23,785*l.*, and the expenditure to 23,186*l.* St. Vincent, with its dependency, the Grenadines, is divided into 6 pars. Kingston, the cap., lies at the bottom of a bay, near the SW. extremity of the island, with an amphitheatre of wooded hills in its rear. The troops, amounting to nearly 900 men, are principally quartered at Fort Charlotte, on a very steep hill, about 1½ m. NW. the town, and 600 ft. above the level of the sea.

St. Vincent was discovered by Columbus, but was inhabited only by Caribs till the latter part of the 17th century, when a slave ship from Guinea having run ashore on the island the blacks mostly escaped, and settling here became in the sequel the most formidable enemies of the Caribs. It subsequently fell into the hands of the French, who ceded it to the English in 1763. In 1779, it was re-captured by the French; but it reverted, in 1783, to Great Britain. The sum awarded, in 1835, for the manumission of the slaves in St. Vincent amounted to 592,509*l.*

VINCENT (CAPE ST.), the *Sacrum Promontorium* of the ancients, a promontory forming the SW. extremity of Portugal, prov. Algarve, 110 m. S. Lisbon, lat. 37° 2' 54" N., long. 8° 59' 36" W. This cape is celebrated in history for the great victory gained in its vicinity on the 14th of February, 1797, by the British fleet under Sir John Jervis, over a Spanish fleet. The British fleet comprised only 15, whereas that of the Spaniards amounted to 27 sail of the line. But notwithstanding this disparity, the latter were completely defeated, with the loss of two-ships of 112, one of 84, and one of 74 guns. The victorious admiral, in acknowledgment of his gallantry and success, was elevated to the peerage by the title of

VIRE, a town of France, dép. Calvados, cap. arrond., near the source of the river of its own name, 35 m. SW. Caen. Pop. 7,647 in 1861. The town is well built, principally on the declivity of a hill, on the summit of which is the foundling asylum, and at the base the general hospital; on the ascent, among other buildings, are the court-house, sub-prefecture, town-hall, and new prison, with a handsome square. In the middle ages, Vire had a castle, of which some remains still exist; but the greater part of its site is occupied by the town-hall and a planted promenade. The principal church is a fine Gothic building. A great deal of activity prevails in Vire, which has manufactures of coarse and fine woollens, woollen yarn, paper of all kinds, needles, and other steel articles, with tanneries and fulling mills. It has tribunals of primary jurisdiction, and commerce, a chamber of manufactures, council of *prud'hommes*, communal college, and public library. Duhamel, and some other eminent personages, were natives of Vire.

VIRGINIA, one of the states comprised in the republic of U. States, being the most extensive in the Union, on the Atlantic, between lat. 36½° and 0½° N., and long. 77° and 84° W., having N. and NE. Pennsylvania and Maryland, from which last it is separated by the Potomac, NW. Ohio, the river of the same name forming the boundary, W. Kentucky, S. Tennessee and N. Carolina, and E. Chesapeake bay and the Atlantic. Length, E. to W., about 350 m.; average breadth, nearly 200 m. Area estimated at 61,400 sq. m. Pop., exclusive of West Virginia, 1,261,397 in 1860. The Alleghany, Blue, and other mountains traverse this state from N. to S. in several parallel ranges, forming its centre into a table land, which in some parts rises to nearly 6,000 feet in height. The western portion of the state is also very mountainous. The extreme western part is composed of a congeries of hills with alluvial bottoms; but the actual mountain ridges encroach so near Ohio river, and the hills are in themselves so generally abrupt and lofty, as to give an alpine appearance to the country. The rivers may be divided into those that flow into the Atlantic, and those that join the Ohio. The Potomac rises in lat. 39° 12' N.; it flows at first NE. to about lat. 39° 50' N., and thence in a SE. direction into Chesapeake Bay, which it enters 70 m., in a direct line, below Washington, after a course of about 360 m. It receives its principal affluent, the Shenandoah, from the SW., at the celebrated mountain-pass of Harper's Ferry, where it breaks through the Blue Mountains, amid some of the grandest scenery of the U. States. The Potomac is navigable for ships of any burthen to Alexandria, upwards of 100 m. from its mouth, being the most distant point from the ocean to which ships of war can be navigated in the interior of the Union. James' river, on which the cap. of Virginia is built, rises in and flows through the centre of this state to Chesapeake Bay, being navigable for vessels of 140 tons to Richmond, 100 m. from its mouth. Over one of its affluents, about 25 m. NW. Lynchburg, is a stupendous natural bridge, 90 feet in length, across a chasm above 200 feet in depth. The Roanoke lies partly within the state; the Rappahannoc, York, and Nottaway are the other principal streams on the Atlantic side. The chief affluent of the Ohio is the great Kenhawah, which rises in N. Carolina, joins the Ohio at Point Pleasant in Virginia, and is navigable to Charleston, 60 m. from its mouth.

As regards surface and soil, Virginia may be divided into 4 sections. The E., or sea-board sec-

head of the tide waters, is generally low and level, but sandy and unproductive, parts of it being mere swamps, and exhibiting almost as desolate an appearance as the pine barrens of New Jersey. The second section, which includes the country between the latter and the Blue Mountains, is, perhaps, the most productive; the alluvial lands along the rivers in this part of the state are, for the most part, very fine; those of James' river especially being remarkable for their fertility. The third section includes the valley between the Blue ridge and the Alleghany Mountains, and, though in parts broken by mountains, has a great deal of fine fertile land. The fourth section includes the country between the Alleghany chain and the Ohio; this portion is in general wild and broken, and is in great part covered by primeval forests. But it also contains large tracts of fine land, with vast deposits of coal, ironstone, and salt.

The wheat of Virginia is inferior, but maize, cotton, tobacco, and numerous fruits attain to perfection. In average years, upwards of 38 million bushels maize are reaped in this state, being more than was produced in any of the Eastern states of the Union; there are also reaped 12,250,000 bushels wheat, and 11,000,000 bushels oats. Tobacco is the principal crop in the E. part of the state; but it is suitable only for the very finest lands, which it rapidly impoverishes, and the individuals engaged in it are in a continued state of exertion, beyond the powers of nature to support.

The culture of cotton is carried on to some, though to no great, extent; some wine is made; and small quantities of sugar are obtained, partly from the cane, and partly from the maple. Agriculture in most parts of the state is in a very depressed and backward state; and the crops are very inferior, compared to what they might be under a different system. Land that has been cleared is usually cropped without intermission or manure, till it is exhausted, when it is left to recover itself. Elsewhere the *three shift* system frequently prevails, by which a crop of maize in one year is succeeded by one of wheat, rye, or oats in the next; and this not by a fallow, but by a year of rest, during which weeds and other herbage, the spontaneous produce of the soil, afford a scanty subsistence to a few half-fed cattle. In parts of the country, however, and especially on the Potomac, some improvements have been made in agriculture; and W. of the mountains along the Ohio are some well irrigated meadows. The mineral riches of Virginia are of first importance. Coal is very widely diffused; the bituminous on the W., and the semi-bituminous and anthracite on the E. side of the mountains. The beds of coal are in many places from 30 to 60 ft. thick, and alternate sometimes with dense beds of iron ore. The coal in the Richmond basin is rather extensively wrought, and the works at New Carron furnish considerable quantities of iron. Gypsum, magnesia, alum, and petroleum, are among the mineral products. The region, including Spotsylvania and some other counties, where the gold is found, abounds in quartz, containing cubes of sulphuret of iron, often partly or totally decomposed, the cells of which are sometimes filled with gold. The latter is found also on the surface, especially of slate, and in its fissures. The metal is obtained by filtration, or washing the earth, and by an amalgam of quicksilver. On the whole, however, the search after gold here has not been very productive, and it is doubtful whether it will ever be of any importance. There are numerous salt, and other mineral springs; those

on the Kenhawah furnishing a very large supply of salt.

The manufactures of Virginia are unimportant; but Richmond and Lynchburg are commercial towns of some eminence. The Potomac is connected with the Roanoke by railways through Fredericksburg, Richmond, and Petersburg, forming a line 157 m. in length: a line 13 m. in length extends from Richmond to the Chesterfield coal mines; and another line connects Lynchburg with the Tennessee line across the Alleghany Mountains. Several canals are completed; the principal being the James' river and Kenhawah canal, 175 m. in length.

The present form of government vests the legislative authority in a general assembly, consisting of a senate of 32 mems., chosen every 4 years, and a house of delegates of 134 mems. elected annually. The governor and council of state are chosen every 3 years. The right of suffrage is exercised by every white male citizen of full age possessing freehold property to the value of 25 dolls., or having a reversionary title to land of the value of 50 dolls., and who has been a householder for 12 months previously to the election. The general assembly meets annually at Richmond in December. The state sends 15 representatives to congress. Virginia is divided into 119 cos. and 10 judicial districts: Richmond on James' river is the cap. and seat of gov.; Williamsburg, Fredericksburg, Charlottesville, Lynchburg, and Lexington, are the other principal towns. Courts of appeal sit once a year at Lewisburg for W., and at Richmond for E., Virginia, and a circuit superior court of law and chancery is held twice a year in each co. and corporation.

Virginia has several colleges and other seminaries. The university at Charlottesville, established in 1819, has a library with 16,000 vols. The college of William and Mary, estab. by the Baptists in 1691, is, excepting Harvard College, the oldest institution of the kind in the Union. There are many other superior schools and academies. An historical and philosophical society was formed in 1832. Baptists and Methodists are the prevailing religious sects, next to whom Presbyterians are the most numerous; there are but few R. Catholics, Friends, Unitarians, and Jews. Nearly the whole of the Baptist association consists of coloured persons. The importance of Virginia has, in consequence of the rapid growth of other states, declined rapidly since the Revolution. The principal towns are Richmond, the capital, Petersburg, and Norfolk.

Virginia was the seat of the earliest colony planted by the English in the states' territory, a part of it having been settled in 1607. Its name, given in honour of Queen Elizabeth, was originally applied to the whole E. coast of N. America. The first legislature of Virginia met in 1619. Notwithstanding serious disputes with the Stuarts, Virginia supported the royal cause in the civil wars; and Charles II. was proclaimed here before the news of his restoration had arrived from England. Virginia took a leading part in the great civil war of 1861-65, espousing warmly the cause of the 'Confederate States.' A portion of the inhabitants, however, remained faithful to the central government; and, to oppose the insurrection, they constituted themselves into a new state, called 'West Virginia,' which was admitted into the union on the 20th of June, 1863. Among the distinguished natives of Virginia is Washington, the father of American independence, born in Westmoreland co., on the 11th of February, 1732. It is also the native country of Jefferson, the author of the 'Declaration of Independence,' and

of the 'Notes on Virginia,' and president of the Union, from 1801 to 1809.

VISTULA (Germ. *Weichsel*), one of the great rivers of Central Europe, flowing from S. to N. through Poland. The basin of the Vistula is situated between those of the Elbe to the W., the Niemen and Dniestr to the NE. and N., and the Dniepr to the SE. It rises in Moravia, in a branch of the Carpathians, close on the frontier of Galicia, and about 20 m. SE. Teschen; and at a short distance from its source is precipitated over a fall 180 ft. in height. It proceeds at first N. for about 40 m., and then turns to the E., separating Silesia, the territory of Cracow, and the kingdom of Poland on the N., from Galicia on the S. Shortly after passing Sandomir it again flows northward, which course it retains through the centre of Poland to beyond Warsaw. It then turns WNW., and pursues generally the same direction to the influx of the Braa, 20 m. from Thorn; after which its course varies little from NNE. to its mouth in the Baltic. Its entire length is estimated at 550 m. It receives a vast number of tributaries, the principal of which are the Nida, Kamienna, Pilica, and Braa, from the W.; and the San, Wieprz, and Bug, with its tributaries from the E. At Cracow it is only about 150 ft. in width; at Warsaw it is crossed by a bridge of boats 1,600 ft. in length. After receiving the Bug, a stream nearly equal in size to itself at Modlin, it proceeds generally in a very wide channel past Plock, Thorn, Culm, and Marienwerder, about 15 m. below which last, and about 80 m. from the Baltic, it divides into two great arms, the most easterly of which, called the Nogat, flows past Marienburg and Elbing into the Friesche Haff. The W. arm, or main stream, subdivides again at about 16 m. from the sea, the E. branch falling into the Friesche Haff, and the W. making a long detour round by Dantzic. The river is of very considerable commercial importance, being, as it were, the great highway of the extensive countries through which it flows; the channel by which their wheat, timber, and other products are conveyed to Dantzic and Elbing for exportation, and by which they receive supplies of colonial and other foreign produce. As it flows for the most part through a level country, it is navigable throughout the greater part of its extent.

Large flat-bottomed boats convey the produce of the countries through which it passes to the port of Dantzic, and Warsaw is thus placed in direct communication with the Baltic; while, by means of the navigation of the Nogat, the colonial produce imported into Konisberg finds a ready access to Poland, Moravia, and Hungary. The Vistula is connected with the Elbe by a canal from the Braa to the Netz, between Bromberg and Nakel; and with the Niemen by means of the canal of Augustowo.

VITERBO, a city of Central Italy, cap. deleg. of same name, in the Campagna, and on the road between Rome and Sienna, 37½ m. NNE. the former. Pop. 13,870 in 1862. The town is well built, with volcanic tufa, and well paved, having a large and handsome square, 16 par. churches, and numerous noble residences, and public fountains. The cathedral has a range of columns on each side, with grotesque capitals supporting semicircular arches. The Trinita is a handsome modern church, in the form of a Latin cross, with a dome in the centre. The church of St. Francis is a large building; the transept has pointed vaulting, and there are 2 fine archways of the pointed style, leading into chapels and some Gothic

del Piombo, from designs by Michael Angelo. The pontifical palace is a fine building. Viterbo is the seat of a cardinal delegate, and a court of primary jurisdiction. It has no manufactures worthy of notice; though alum, vitriol, sulphur, and other volcanic products are obtained in its neighbourhood, which abounds with mineral springs.

Viterbo is supposed to occupy the site of the *Fanum Voltumnae*, the place where the general assembly of the Etruscan nations was held on solemn occasions. The modern town was encircled with turreted walls by Desiderius, the last king of the Lombards. It has been the residence of numerous popes, several of whom are buried in its churches. In its vicinity are many villas belonging to some of the more opulent Roman families.

VITRÉ, a town of France, dép. Vilaine, cap. arrond., on the Vilaine, 28 m. W. Rennes. Pop. 8,904 in 1861. The town is enclosed by walls of Gothic character and flanked by round towers. Vitré is ill built, and destitute of any public promenade; though the environs are agreeable, and in the vicinity are two parks open to the public. About 1½ m. S. from the town is the Château des Rochers, the seat of Madame de Sévigné, the most accomplished of letter writers, who sometimes also occupied a house in the town. Near the town are also the ruins of the castle, formerly belonging to the Dukes de la Trimouille. The peasantry of the neighbourhood wear winter cloaks of goat skins, which, with cotton hosiery, sail cloth, flannels, leather, and barrels are among the principal articles manufactured in Vitré. Wax, honey, and cantharides are here considerable articles of trade, and the town has no fewer than 22 annual fairs. Savary, the traveller, was a native of Vitré, where he first saw the light in 1750.

VITRY-LE-FRANCOIS, a town of France dép. Marne, cap. arrond., on the Marne, 20 m. SSE. Chalons. Pop. 7,622 in 1861. The town is square shaped, and is enclosed by earth ramparts, and bastions, outside which is a deep moat. It is tolerably well laid out; and though most of its houses are old and unprepossessing, it has a good many new buildings erected since the peace. Its church, an edifice in the Corinthian and Composite styles, was the earliest of any consequence built after the restoration of the arts, in the time of Francis I., under whom this town was founded. Vitry has a good public hall and theatre, and, agreeable public walks, with some manufactures of cotton yarn and hosiery, hats, and leather.

VITTORIA (Span. *Vitoria*), a town of Spain in Biscay, cap. prov., on the railway between Burgos and Bayonne, 60 m. NW. the former. Pop. 15,569 in 1857. Vittoria consists of an old and a new town, very different in appearance; the latter being clean and handsome, while the former is quite the contrary. The Plaza Nueva has arcades at its sides, under which are very good shops: the S. side is occupied by the town hall, and the area serves for a market place. The hall of the Biscayan Society, orphan asylum, and general hospital are among the principal edifices. Vittoria has a collegiate and four par. churches, six conventual establishments, a school of design, public library, cabinet of coins and Roman antiquities. Its manufactures comprise chairs and cabinet furniture, copper utensils, earthenware, cutlery, and linens, and being one of the principal entrepôts for the trade between Navarre and Old Castile, and the ports of St. Sebastian and Bilbao, it has a considerable traffic in iron, wool, woollen, and silk fabrics, articles of clothing, and colonial produce.

in its vicinity, on the 21st of June, 1813, by the Anglo-Spanish army, under the Duke of Wellington, over a French army commanded by King Joseph and Marshal Jourdan. Though the loss of men in the battle was nearly equal, the French were totally defeated, with the loss of all their artillery, baggage, ammunition, and treasure, and obliged to make a rapid retreat across the Pyrenees, this battle having all but annihilated their power in Spain.

VIZAGAPATAM, a sea-port town of British India, presid. Madras, coast of Coromandel, cap. of a district of same name, in the N. Circars, at the mouth of a small river, lat. $17^{\circ} 42' 30''$ N., long. $83^{\circ} 24'$ E. It is not a place of any strength, its only defensive works being a thick wall enclosing the Zillah court house, hospital, other European buildings, and a bazaar in the centre of the town. The barracks and other public edifices are outside this wall. A good many well-built houses stretch along the shore; but the great insalubrity of the town has driven most of the former European residents to Waltier, a village at some little distance.

VLADIMIR, a government of European Russia, between the 55th and 57th degs. of N. lat., and the 38th and 48rd of E. long., having N. Jaroslavl and Kostroma, E. Nijni Novgorod, W. Tver, and S. Moscow, Riazan, and Tambof. Area estimated at 17,600 sq. m. Pop. 1,207,908 in 1858. Surface almost a level plain, watered by numerous rivers, the principal being the Oka in the E., the Volga in the W., and the Kliazma, a tributary of the Oka, in the centre; all of which have, more or less, a NE. course. The soil is not generally fertile, and a large part of the government is covered with forests, marshes, pools, and heaths. Rye, barley, oats, summer and winter wheat, millet, peas, hemp, and flax, are grown; but the crops of corn are insufficient for the consumption. The gardens and orchards are numerous and well attended to; and Vladimir is famous for its cherries and apples. A good many cucumbers and some hops are raised. Cattle rearing is a secondary business, and is far behind. The forests are of vast extent, those belonging to the crown alone covering about one-ninth part of the entire surface. Extensive and valuable beds of iron ore have been found in the forest of Mourom; and at Vixa, on the Oka, are some of the most extensive iron-works in Russia. The poverty of the soil, and other concurring circumstances, have turned the attention of the inhabs. towards manufactures, which appear to have succeeded better in this than in most other Russian governments. The cotton manufacture, which is by far the most extensive, is principally carried on at Chouia and Ivanova. The manufacture of woollen and linen is of less importance; but about 4,000 hands are employed in iron foundries; and about 1,300 in glass and crystal works, exclusive of those employed in the production of leather and earthenware. The various products of the government are sent down the Kliazma and Oka, or else to Moscow, by means of land carriage. Corn, cotton-twist, and flax, from the neighbouring governments of Kostroma, Jaroslavl, and Nijni Novgorod, are the chief articles of import. Vladimir is divided into 13 districts; chief towns, Vladimir, the cap., Chouia, and Mourom.

VLADIMIR, a town of European Russia, cap. of the above government, near the Kliazma, and on one of its small tributaries, 110 m. E. by N. Moscow, on the railway to Novgorod. Pop. 13,348 in 1858. The town occupies a site rather more elevated than the rest of its government. It is surrounded by a ditch and earth rampart, and like

almost all the ancient towns of Russia is divided into three portions. Its principal street is long, wide, and lined with houses, of wood and stone intermixed. The cross streets are mostly mean. The principal structure is the cathedral of the Assumption, a square edifice, surmounted by five domes, and richly ornamented inside, though much less magnificent than formerly. There are about a dozen other churches. The former palace of the archbishop now serves for a seminary. The governor's house, court-house, and gymnasium, are brick edifices. Vladimir is not considered a wealthy town or a principal emporium, owing partly to its distance from any large navigable river, and partly to the proximity of Moscow. Being, however, on the great road to the fairs of Nijni Novgorod and Irbit, and on the grand line of communication between Russia and Siberia, it often presents a busy and cheerful aspect. Some of its inhabs. are occupied in making linen cloths and leather; and many others in the cultivation of fruit, particularly cherries, which are grown in great quantities in the neighbourhood.

The era of its foundation is uncertain; some authors place it in the 10th, and others in the 12th century. Vladimir was, however, the cap. of the grand duchy of Russia from 1157 till 1828, when that distinction was transferred to Moscow.

VOGHERA, a town of N. Italy, prov. Pavia, on the Staffora, 21 m. E. by N. Alessandria. Pop. 13,201 in 1862. The town is well built, is surrounded by walls, has a good market-place, a magnificent collegiate church, a Jesuits' college, several monasteries, large barracks, and a good hospital. It is the residence of a governor, and the seat of a provincial court of justice; it has an active trade in corn, wine, and silk.

VOLCANO. See LIPARI ISLANDS.

VOLHYNIA, a gov. of European Russia, formerly comprised in the kingd. of Poland; principally between the 50th and 52nd degs. of N. lat., and the 24th and 29th of E. long., having NW. and N. the gov. of Grodno and Minsk, E. and SE. Kief, S. Podolia, SW. Austrian Poland, and W. the palatinate of Lublin. Area estimated at 27,500 sq. m. Pop. 1,528,328 in 1858. It is in general an undulating plain; and the hills, which are the last ramifications of the Carpathians, though they nowhere rise to 300 ft. above the sea, give an agreeable variety to the scenery. The Bug rises in this prov.: the other principal rivers are the Styr and Goryne, tributaries of the Pripietz. Along some of these are extensive marshes and beds of turf; but in general the land is very fertile, producing at an average, a considerable surplus of corn above the consumption. A good deal of flax and hemp is also grown. Agriculture is, however, not more advanced than in the rest of Russian Poland, and the gardens and orchards, particularly the former, are much neglected. The climate, though comparatively mild, is not warm enough for the vine. The forests comprise oak, beech, lindens, firs, and pines, and are very extensive, though only about 44,754 deciatines of forest land belong to the crown. The pastures are excellent, and well adapted for the fattening of cattle; a good many sheep, hogs, and poultry are kept. Volhynia has a breed of horses smaller than the generality of those of Poland. Fishing is an occupation of some importance; bog-iron, mill-stones, potter's clay, nitre, and flint are among the mineral products. Though agriculture is the chief occupation of the inhabitants, the manufacturing industry of Volhynia is greater than that of most other parts of Russian Poland. The women almost everywhere spin and weave different fabrics; and leather, glass, and earthen-

ware, paper, potash, tar, and charcoal, are generally made. The principal exports are corn, cattle, hides, flour, wool, wax, honey, and other rural produce. The trade is principally in the hands of the Jews, of whom there are about 40,000 in the gov. The rest of the pop. consists of Rusniaks, with Poles in the towns, and some Great Russians, gypsies, Tartars, Moldavians, and Germans. The inhabitants are mostly of the Greek, or united church. Volhynia is divided into 12 districts; principal town, Żytomir or Jitomir, the cap. A large annual fair is held at Easter at Berdichef. Public education appears to be less backward in this than in most of the Russian governments. Volhynia, like Podolia, is subordinate to the military governor of Kief, but is one of the Polish provinces, which preserves, in some degree, its ancient constitution and laws.

VOLOGDA, the largest government of European Russia, after that of Archangel, between the 58th and 64th degs. of N. lat.; and the 38th and 60th of E. long., having N. Archangel, W. Olonetz and Novgorod, S. Jaroslavl, Kostroma, and Viatka, and E. the Ouralian Mountains, separating it from Tobolsk. Area estimated at 147,000 sq. m. Pop. 951,593 in 1858. Except in the E., where it is covered with the Ouralian Mountains, the surface generally is undulating, comprised in the basin of the N. Dwina, which is its largest river. The general slope is accordingly to the NW. In the S. and SW. the soil is fertile, but elsewhere it is sandy or thin, and the greater part of the surface is covered with marshes and forests of pine, birch, and oak. Though the climate varies with the situation, it is, speaking generally, very severe; it is far, however, from being unhealthy, and instances of longevity are frequent. The grains principally cultivated are rye and barley; but the produce of corn is insufficient for the consumption. Hemp, flax, and hops succeed, as do beans and peas. Cattle and horses are numerous and good; but a large part of the government being unoccupied and in a state of nature, the chase necessarily occupies much attention. The forests, which are its principal source of wealth, are of great extent, those of the crown only covering 29,558,000 deciatines of land. Granite, marble, salt, flints, copper and iron, are all obtained in Vologda. There are a number of manufacturing establishments, principally for woollen and linen fabrics, soap, leather, potash, glass wares, and paper. Distillation is also very extensively carried on. Furs, tallow, pitch, wooden articles, masts and timber, turpentine, and other raw products, are the great articles of export; being sent, for the most part, into the governments of Archangel and Tobolsk.

The pop. is principally Russian, but include some Zyrians or Surjans of Finnish stock; and in the N. are some wandering Samoyede tribes. Public instruction, owing to the thinness of the pop., is very limited; but it has been materially increased of late years. This territory is divided into 10 districts: the chief towns are Vologda, the cap., and Ustiug-Veliki.

VOLOGDA, a town of European Russia, cap. of the above government, near its SW. extremity, 352 m. E. by S. Petersburg. Pop. 16,425 in 1858. The town is built on both sides the river Vologda, and is supposed to be one of the most ancient towns in Russia. Most part of its houses are still of wood, but the buildings in stone are increasing, and several of its churches are of that material. It has two cathedrals, one of which was rebuilt in 1832. The palaces of the archbishop and governor,

lieces. Near the town is a famous convent, founded in 1371.

Vologda has manufactures of soap, potash, cordage, bells, and tallow candles; for which last it is famous over all the N. of Russia. Its trade is principally with the Baltic, Germany, and England; and also with Siberia, to the boundaries of the Chinese empire.

VOLTERRA (an. *Volaterra*), a town of central Italy, prov. Pisa, on a steep hill near a small tributary of the Cecina. 33 m. SW. Florence. Pop. 13,090 in 1862. Volterra has a citadel, now used as a prison; a hospital, a cathedral, and many other churches; a large and fine town-hall, a theatre, a Piarist college, and a seminary. Its inhabs. are principally agriculturists, but a few of them are engaged in the manufacture of earthenware vases and plaster figures.

Dion. Halicarnassus, assigns to Volterra a place among the 12 principal cities of ancient Etruria, and the extent of its remains, its massive walls, vast sepulchral chambers, and numerous objects of Etruscan art suffice to show its antique splendour and importance, and claim for it that rank. Its walls were formed, as may yet be seen, of huge massive stones, piled on each other without cement; and their circuit, which is still distinctly marked, embraced a circumference of between 3 and 4 m. Two of its original gates are still in existence: one, called the Gate of Hercules, consisting of 2 arches, is in a very perfect state, and the other leads to an ancient Etruscan burial-ground, in which are some remarkable tombs. Under the Romans it was a colony and a municipium, and the walls of the modern town, 2 m. in circuit, are said to have been built by the Emperor Otho, and are still in good preservation. There are several other Roman antiquities, including a *piscina* and what are called the baths of Otho. Volterra has also a public museum, containing numerous remains of antiquity discovered in the neighbourhood. Persius, the satirist, is generally supposed to have been a native of Volterra, where he is said to have been born A.D. 34.

VORONEJE, or WORONETZ, a gov. of European Russia, between lat. 48° 40' and 53° N., and 38° and 43° E. long.; having N. the govs. Riazan and Tambof; E. Saratof and the territory of the Don Cossacks; S. the latter and the gov. of Ekaterinoslaf; and W. Kharkoff, Kursk, and Orlof. Area estimated at 25,600 sq. m. Pop. 1,930,859 in 1858. Surface undulating, and soil in general good; this being, in fact, one of the most productive govs. in the empire. Principal rivers, the Don and some of its tributaries. Climate comparatively mild; the rivers being covered with ice for only two or three months of the year, and the gov. producing most of the products of temperate climates. Of 6,876,000 deciatines (1 deciat = 2.7 acres) comprised in the gov. the arable lands have been estimated to include 2,711,800, pasture lands, 2,818,000 do., and forests, 620,755 do. In good years a surplus is raised of about 1,500,000 chetverts of corn beyond the home consumption. Besides wheat, peas, and beans, poppies, tobacco, hemp, and flax are grown; and, in the gardens, melons, cucumbers, and onions in large quantities. Water melons are cultivated for the markets of Moscow and Petersburg, being planted in open fields covering whole acres of land. In some parts canes and reeds are used for fuel, but in general the forests furnish a sufficient supply of fire-wood. Oaks are numerous and luxuriant; pine woods are few. Honey is an important product. Iron, limestone, and saltpetre are among the minerals.

consist principally of corn, cattle, skins, honey, wax, and fruits.

This gov. is divided into 12 districts: chief town, Voroneje, the cap. Except a colony of Germans near Ostrogojok and some gypsies, the pop. consists in the S. of Cossacks and White Russians, in the N. of Great Russians. Voroneje is under the same governor-general with Riazan, Orel, Tambof, and Saratof.

VORONEJE, a town of Russia, cap. of the above gov., on the river of the same name, near its confluence with the Don, and 290 m. SSE. Moscow. Pop. 40,439 in 1858. The town stands on a steep height, and might easily be rendered a fortress of some strength, as it is not commanded by any other hill, and is partly surrounded by a marsh for several months of the year. It consists of three portions, the upper town, lower town, and suburbs. It has some spacious streets, but a great many which are very mean: the suburbs are black and gloomy. The principal street has a noble appearance, its sides being lined with massy and handsome edifices, many of them the property of the crown, as the governor's and vice-governor's houses, the tribunals, post-office, and commissariat academy. The Moscow (Moskovskaya) street is also very fine, and in it are the archbishop's palace, with an adjoining cathedral.

Voroneje has 18 stone churches, 2 convents, an exchange or *gostinõi-dvor*, for the warehousing, exhibition, and sale of merchandise, an episcopal seminary, schools for the children of the clergy, military, civil employes and citizens, a hospital for 310 sick persons, and a military orphan asylum. It is one of the most flourishing towns in the S. of Russia, and its merchants carry on a lucrative trade with the Black Sea, Crimea, and Turkey, and travel annually to Tobolsk, to buy furs, which they afterwards take to the great German fairs. The town has also some soap, tallow, leather, and woollen cloth factories.

It is supposed to be among the oldest Russian towns, and is spoken of as existing in the 12th century. Here Peter the Great built a palace and established a dockyard and arsenal; but the latter establishments were afterwards removed successively to Ustka, Tavrof, and Kostof; and nearly all traces of the palace and magazines have been obliterated by the frequent fires which the town has since suffered.

VOSGES, a dép. of France, reg. NE., principally between the 48° and 49° lat., and the 5° and 7½° of E. long., having N. the déps. Meurthe and Moselle, E. the dép. of the Rhine, S. Haute-Saône, and W. Haute-Marne. Area, 607,995 hectares. Pop. 415,485 in 1861. This dép. derives its name from the Vosges (Germ. *Wasgau*)

mountains, a chain which extends parallel with the Rhine, separating the déps. of Haute and Bas-Rhin on the E. from those of Haute-Saône, Vosges, and Meurthe on the W., stretching also into Rhenish Bavaria, and terminating to the NE. in Mont Tonnerre. These mountains usually rise between 4,000 and 5,000 ft. above the sea, and their summits are covered with snow for most part of the year. They send off a remarkable continuation, the Faucilles mountains, E. and W. through this dép., by the ramifications of which nearly its whole surface is covered. The Moselle, Meuse, Meurthe, Madon, and Saône rise in this dép., all of which, except the Saône, have a N. course. Small lakes are numerous. The arable land, which is said to comprise 244,745 hectares, is not generally fertile; the meadows comprise 76,330 hectares; woods, 129,474 hectares; and heaths and wastes, 36,550 hectares. In a portion of the dép. called 'the plain,' to the W. of Epinal, agriculture is well advanced. The land is divided into very small properties; so much so, that of 148,699 properties subject to the *contrib. foncière*, 87,600 are assessed at less than 5 francs, and only 43 at 1,000 francs or upwards. The rearing of stock is the most important branch of husbandry, and a greater number of cattle are kept in this than in any other of the NE. déps. Sheep are less numerous, and the annual produce of wool is said not to exceed 45,000 kilogr. The annual produce of cheese may be about 20,000 kilogr.; and that of wine (of very indifferent quality) about 150,000 hectolitres; about 120,000 kilogr. of hops are annually sent to Paris. Cherries are grown in large quantities, and the dép. is famous for its *kirschenwasser*. A good many hogs are fattened in the mountains. The forests abound in good fir timber, great quantities of which are floated down the rivers as deals and rough timber. Iron is the chief mineral product; but it also produces coal, argentiferous lead, copper, manganese, granite, marble, and porphyry, though many of these resources are much neglected. The manufacture of steel and iron goods hold the first rank. Knives and forks are made at Bruyères; bayonets at Sionne, and nails at Neufchâteau; plate iron is made in large quantities at various places; and Plombières is famous for its cutlery. Cotton stuffs are made in the arronds. of Remiremont and St. Dié. Lace, musical instruments, barrels, and wooden shoes are considerable articles of manufacture; and there are various glass and marble works, tanneries, and breweries. Vosges is divided into 5 arronds.: chief towns, Epinal, the cap.; Mirecourt, Neufchâteau, Remiremont, and St. Dié.

W.

WAAL, a river of the Netherlands. See RHINE.

WAGRAM, a village of the archduchy of Austria, country below the Enns, on the left bank of the Rossbach, 11 m. NE. Vienna. This village is celebrated in military history for the great battle fought in its vicinity, on the 6th of July, 1809, by the French army under Napoleon, and the Austrians under the Archduke Charles. The former gained a complete victory; the Austrians lost above 20,000 men taken prisoners, besides a vast number killed and wounded. This victory led to an armistice, followed by the treaty of Schönbrunn.

WAKEFIELD, a parl. bor., market-town, and par. of England, W. Riding, co. York, lower div. of Agbrigg, weapont. Agbrigg and Morley, on the Calder, 30 m. SW. York, 9 m. S. Leeds, and 181 m. N. London by Great Northern railway. Pop. of par. 35,739, and of parl. bor. 23,150 in 1861. Area of par., comprising the townships of Wakefield, Stanley-cum-Wrenthorpe, Alverthorpe-with-Thornes, and the chapelry of Horbury, 9,390 acres. The parl. bor. includes only the township of Wakefield, with small portions of Alverthorpe and Stanley. The town is situated on the declivity of a hill sloping to the river, which is here

crossed by a handsome stone bridge of nine arches. It is well built, the houses being mostly of brick; streets spacious and regular, paved, and lighted with gas; and, since 1839, the town has been plentifully supplied with pure water by the W. Waterworks Company. The market-place is small, but is well supplied with butchers' meat, fruit, vegetables, and other articles.

Wakefield is one of the principal country corn markets in England; and the new corn exchange at the head of Westgate is in all respects suitable for the dispatch of the important business of which it is the centre. On the SW. side of Wakefield township the buildings advance in a continuous street into that of Alverthorpe, now embodied in the parl. bor.; and at the W. end of the town, and in Stanley township, are a great many buildings known by the name of East Moor, which also form part of the bor., which farther comprises the small village of Thornes on the S. The latter is connected with the town by an almost continuous line of houses and warehouses. The parish church of All Saints is a handsome edifice of English architecture, 156 ft. in length, and 69 ft. in width, founded in the reign of Henry III., but retaining few of its ancient features. It has a square tower, with battlements and pinnacles, surmounted by a spire, 237 ft. in height, said to be the highest in the co. The church of St. John, in the district of the same name, erected in 1795, was, in 1815, rendered parochial jointly with All Saints. There are 6 other churches, and numerous places of worship for Independents, Wesleyans, Friends, Primitive Methodists, Unitarians, Roman Catholics, and Baptists. In the centre of the bridge, projecting from its E. side, is a richly ornamented Gothic chapel, 30 ft. in length by 21 in breadth, believed to have been founded by Edward III., but rebuilt and decorated by Edward IV. to commemorate the death of his father, Richard, duke of York, and his partisans at the battle of Wakefield. In the market-place is a Doric cross, with an open colonnade supporting a dome, and containing a room in which the street commissioners transact business. The music saloon, subscription library, and news-room, in Wood Street, is a handsome building. Here, also, is a literary and philosophical society, a mechanics' institute, a masonic lodge, and a theatre. The new and commodious corn exchange, at the top of Westgate, contains, exclusive of the exchange and several offices and shops, a very large assembly-room, with ante-rooms. The building called the Tammy Hall, for the exhibition and sale of woollens, has long been occupied as a worsted manufactory. The free grammar-school, founded by Queen Elizabeth in 1592, and since enriched by various private benefactions, has a considerable income, and has long enjoyed a high reputation. It is open, free of expense, to the sons of the inhabs. desirous of a classical education, and has upwards of 90 scholars. It has an attached writing school, and 4 exhibitions to Cambridge and 1 to Oxford. Some very distinguished personages have been educated in this school, among whom may be mentioned Dr. John Potter, archbishop of Canterbury, author of the popular and excellent work on Grecian antiquities, a native of the town; Dr. Radcliffe, founder of the library at Oxford which bears his name, also a native of the town; and Dr. Bentley, the eminent critic and scholar, a native of Oulton, in the vicinity. The green-coat school, founded in 1707, with an income of above 500*l.* a year, clothes and instructs about 75 boys and 50 girls; and among other schools is a charity school for 106 poor boys and 50 girls, 2 national schools, esta-

and several Sunday schools; in all affording instruction to nearly 2,000 children. The proprietary school, opened in 1834, is a fine building, in which about 200 pupils receive a classical and commercial education. The West Riding Pauper Lunatic Asylum, erected in 1817, 1 m. NE. of the town, is a noble building, capable of accommodating above 400 patients. A dispensary and fever ward was established a few years since; and there are well-endowed almshouses for both sexes.

Wakefield had formerly an extensive manufacture of woollens and worsted yarn, but this, owing to the superior facilities for carrying on the manufacture enjoyed by other places, or their greater attention to the business, has greatly declined; still, however, a considerable business is carried on in the manufacture of spinning worsted and in dyeing; and it is an important mart, not merely for corn, but also for wool and cattle. Great quantities of wool are sent from all parts of the surrounding country to be disposed of by the wool factors; the cattle fairs held every fortnight are very extensive; malting is also carried on to a considerable extent; and there is a soap-work at Walton in the vicinity. The coal mines in the parish employ a great many hands.

Wakefield, though in an inland situation, communicates by the Aire and Calder Navigation and various canals with Leeds, Hull, Manchester, and Liverpool, and several branch railways lead from the town to the different collieries in the vicinity. The North Midland railway from Leeds to Derby passes by Oakenshaw, 1½ m. SE. from the town, and the Leeds and Manchester railway passes the S. end of the town. There are two railway stations. The town is under the jurisdiction of a constable elected by the inhabitants. Quarter sessions are held in the court-house, a handsome edifice in Wood Street, and petty sessions for the district in the court-house every Monday by the co. magistrates. A court for petty causes, and the recovery of debts under 5*l.*, is held every three weeks by the steward of the manor. Here is also the W. riding register office, the officer of the clerk of the peace, and the rolls office for the extensive manor of Wakefield. The house of correction for the W. riding of Yorkshire is at Wakefield; it is built on an improved plan, and comprises a tread-mill, 307 cells, separate yards, a chapel, and was considerably improved and enlarged in 1843. The prisoners are employed in weaving coarse cloths and calicoes. The Reform Act conferred on Wakefield, for the first time, the privilege of sending a mem. to the H. of C. Reg. electors, 1,108 in 1865.

At the era of Domesday Survey, Wakefield, with its dependencies, was in the hands of the crown. The battle of Wakefield, fought in the vicinity of this town, on the 24th of December, 1460, was one of the most important gained by the Lancastrians during the civil wars; the latter, under Queen Margaret, having totally defeated the Yorkists under the Duke of York, who fell in the battle, and whose son, the Earl of Rutland, was assassinated immediately thereafter. In 1554, Wakefield was united to the duchy of Lancaster. The manor, which extends for more than 30 m. W. of the town, including above 150 towns, villages, and hamlets, and about one-eighth part of the entire pop. of Yorkshire has belonged to the family of the Duke of Leeds since 1700, and was devised by the late duke to his son-in-law, Walter Sackville Lane Fox. Market days, Fridays, and every alternate Wednesday, for cattle and sheep. Fairs, July 4th and 5th, and Nov. 11th and 12th,

WALCHEREN, the most W. of the islands of Holland, prov. Zealand, between the E. and W. Scheldt, having on the W. the N. sea, or Atlantic, and on the E. the Narrow Channel, by which it is separated from the Island of Beveland. It is of a compact circular shape; length, E. and W., about 12 m.; greatest breadth 10 m. Pop. about 45,000. The surface is quite level, and below high water mark. Its W. side, or that facing the N. sea, is defended against its encroachments partly and principally by a line of sandhills, or *dunes*, and partly (at W. Capelle) by a very strong dyke: its sides, washed by the E. and W. Scheldt, are also defended by prodigious dykes. This is the most fertile, most populous, and best cultivated of all the Dutch islands; the inhabs. are mostly in easy circumstances, and besides Middleburg, the cap., it has the towns of Flushing and Vere, and several flourishing villages. It produces excellent crops of wheat and madder, considerable quantities of the last being sent to England. The climate, though not injurious to natives, is apt to exercise an unfavourable influence over strangers. This was strikingly exemplified in the result of the ill-fated expedition of the British troops to Walcheren under the Earl of Chatham in 1809: a great proportion of the force died on the spot from the attacks of a malignant marsh fever, while many of those who survived had their constitution shattered for ever.

WALDECK, a principality of W. Germany, consisting of two separate portions, the most southerly and principal of which has Prussian Westphalia on the N. and W., while the most northerly and smaller, including the town of Pyrmont and adjacent territory, is almost surrounded by Lippe-Detmold and Hanover. Aggregate area, 466 sq. m. Pop. 58,604 in 1861. Surface hilly, having a mean elevation of 1,000 ft. above the sea: its mean annual temp. is about 45½° Fah. Both Waldeck and Pyrmont belong to the basin of the Weser; principal rivers, the Eder, Diemel, and Emmer. About 152,300 morgen of land, or nearly one-third part of the surface, is covered with forests. It produces an adequate supply of corn for home consumption, with potatoes, fruit of various kinds, and flax. Cattle breeding is an important branch of industry. Copper, iron, salt, alabaster, marble, and slates are raised, and a large proportion of the prince's revenue is derived from the mineral waters of Pyrmont, which is one of the principal spas of Germany. Manufactures unimportant; those of iron goods, which were formerly considerable, having, of late years, greatly declined: at present the principal are those of linen and woollen stuffs, paper, leather, and cotton hosiery. The chief exports are fine wool, corn, cattle, iron, mineral waters, and a few manufactured articles.

The constitution is a limited monarchy, the diet consisting of 18 mems. of the nobility, 13 representatives of towns, and 10 deputies from the rural districts. The diet has the voting of the supplies, but most part of the public business is carried on by a committee consisting of three mems. from each of the three estates composing the diet. The public revenue, in 1862, amounted to 65,310*l.*, and the expenditure to 66,573*l.* Arolsen, a town of above 2,000 inhabs. on the Aar, is the cap. and seat of gov. Pyrmont, on the Emmer, one of the oldest watering-places in Europe, with above 3,000 resident inhabitants, is the other principal town. Waldeck-Pyrmont holds the 29th place in the German confederacy, and contributes 866 men to the confederate army.

WALES. See ENGLAND AND WALES.

WALES (NEW SOUTH). See AUSTRAL-ASIA.

WALLACHIA AND MOLDAVIA, also called **ROUMANIA** (anc. *Dacia*), two contiguous principalities of SE. Europe, provisionally united since 1861, and nominally included in European Turkey, but really under the protection of Russia. They lie principally between 44° and 49° N. lat., and 23° and 29° 30' E. long., and are together of a crescent shape, enclosing Transylvania on the W. and NW. Wallachia comprises the S., and Moldavia the E. and N. parts of the united territory. The former has on the N. Transylvania, from which it is separated by some branches of the Carpathians and Moldavia, and from the W. round by the SW. to the SE. it is bounded by the Danube, which divides it from Servia and Bulgaria. Moldavia has on the N. and E. the Pruth, the boundary of the Russian prov. of Bessarabia, on the W. the Bukowine and Transylvania, and on the S. Wallachia. The Sereth forms the principal line of demarcation between the principalities. The area and population of the united principalities is calculated at—

| | Area in Square Miles | Population in 1844 | Population in 1860 |
|-----------------|----------------------|--------------------|--------------------|
| Wallachia . . . | 27,500 | 2,324,000 | 2,400,921 |
| Moldavia . . . | 17,020 | 1,254,000 | 1,600,000 |
| Total . . . | 44,520 | 3,578,000 | 4,000,921 |

Enumerations of the people took place in Wallachia in 1844 and 1860; but there has been no census in Moldavia, and the above figures are only estimates. The capital of the principalities and seat of the government, Bucharest, had, according to the enumeration of 1860, a population of 124,734. The same census showed a large preponderance of the male over the female population in Wallachia. Among the inhabitants are nearly 500,000 gipsies.

Physical Geography and Products.—The Carpathians, where they separate these provs. from Transylvania, usually vary in height between 3,000 and 5,000 feet, though some summits rise to 7,000 or 8,000 feet in elevation. From these mountains the surface gradually declines to the S. and E., through regions of a most picturesque character, and hill ranges and valleys of great fertility, till it terminates in a level and marshy plain from 12 to 20 leagues in breadth, which, with parts of Bulgaria and Bessarabia, constitutes what may be considered the second in point of size and importance of the great European plains. The whole country is thoroughly well watered, being intersected by several large affluents of the Danube, most of which are navigable for a considerable distance, and which annually inundate the surrounding country. The winter is very severe, particularly in Moldavia, which is open to the full force of the NE. wind. The Danube, with its various tributaries, is generally frozen over for six weeks, during which period the ice is often strong enough to bear the passage of the heaviest artillery. In the first two months of the year the snow is so very thick that the communication is everywhere carried on by means of sledges. A damp spring succeeds. In May the summer bursts in on a sudden, and then, though the heat during the day be excessive, the nights are frequently cool, or even cold. The pleasantest season is the autumn, from September to the middle of November. The climate cannot be said to be unhealthy; but in the plains along the Danube endemic fevers occasionally prevail, and in the hill region goitres are extremely common.

Earthquakes sometimes occur, but happily they are rarely violent. Most part of the country towards the Danube consists of a rich alluvial soil; elsewhere tertiary and calcareous, and in the Carpathians primary formations are prevalent. In the latter, ores of gold, silver, mercury, iron, copper, and other metals are found, and several mines were opened during the Russian occupation of these provinces. At present, except salt mines, few others are wrought, and the gold obtained is chiefly by washing the river deposits, an occupation almost solely confined to the gipsies, who pay their tribute partly in gold dust. Petroleum, sulphur, nitre, and coal are met with, but not much sought after. The salt of Wallachia, which is of the purest kind, forms an article of sale in all the bazaars of the country. Oak, pine, fir, beech, maple, elm, ash, walnut, and white mulberry are the chief forest trees. The climate is unsuitable for the fig and olive, but apples, pears, plums, cherries, and apricots come to perfection with little culture. Asparagus is indigenous; cabbages and artichokes grow to a great size, and cucumbers and melons are among the principal articles of food. Deer, wild goats, and hares are very numerous. Wolves, when pressed by hunger, come down from the mountains and commit much devastation among the flocks and herds; but at other times, like the bears and other wild animals in these provs., they rarely attack man.

Land and Agriculture.—The land principally belongs to the nobles, or *boyars*, though it is seldom cultivated by them on their own account. No regular system seems to be pursued as respects the arrangements between the landholders and cultivators; but, for the most part, the cultivators pay to their landlords a tithe of their whole produce of corn, and, in addition to this, they are bound to pay the land-tax and other burdens, and to work thirty days in the year for their landlords. Owing to their subdivision among the children, on the death of a parent, there are now but few large properties. The mode of tillage does not differ much from that in other parts of Eastern Europe. Oxen are usually employed for field labour. Manure is never used; but, after a crop of corn, the land is left fallow for a season, and then sown with wheat, maize, rye, and barley, which are the principal crops. Oats are but little cultivated. Maize and rye are the bread corns in general use, and both of them, but especially the former, are largely exported. Wheat is mostly raised for exportation; barley is principally used in distillation and as food for cattle, but it is sometimes also rather extensively shipped. Speaking generally, the wheat of Moldavia, though inferior to that of England or Poland, is from 10 to 12 per cent. superior to that of Wallachia. In the latter prov. the wheat is mostly soft, whereas in the former it is mostly hard.

No very accurate estimate can be given of the probable produce of the corn crops in the principalities. But since the trade of the Danube was opened by the treaty of Adrianople in 1829, and especially of late years, the exports have increased very greatly; and such is the fertility of the soil, that with security and tranquillity at home, and a ready demand from abroad, these provinces would most likely become one of the principal granaries of Europe. Galacz (which see) is the principal port of Moldavia, and Ibraila or Brailow (which see) of Wallachia. A few years ago Danubian wheat was generally damp, and had an earthy smell, from its being kept in pits dug in the ground, but latterly it has been much improved. A good deal of wine is made on the hill slopes, particularly in Moldavia. It is mostly of very

indifferent quality; but some of the wines are pleasant and wholesome, resembling the light wines of Provence, and they are largely exported to Russia and Transylvania. The strength and spirit of the wine are increased by a process common among the rich proprietors, and practised also in Russia.

At the first approach of severe cold, the wine butts are exposed to the severity of the weather in the open air: in a few nights the body of wine is encircled with a thick crust of ice; this is perforated by means of a hot iron, and the wine, thus deprived of its aqueous parts, is drawn off clear, strong, and capable of being preserved for a long time.

The rearing of cattle, rather than agriculture, has been, and continues to be, the principal employment of the Wallachians. Their flocks and herds find abundant and nutritive pastures in winter in the plains, and in summer on the Carpathians. The number of sheep and goats in Wallachia has been estimated at 4,000,000, and the annual produce of wool in both provs. at 40,000 quintals. There is no public establishment for the washing of wool, but private individuals sometimes wash it at home, which commonly increases the price about 40 per cent., but the greater part is sold in the grease.

Taking their size into account, Moldavia is richer in horned cattle than Wallachia, which, on the contrary, takes the lead in sheep. In both principalities the cattle and sheep are bought up by the dealers, who pasture them throughout the summer with the view of selling or slaughtering them in August and September. The number of horned cattle fattened in this manner for sale may amount to 70,000 or 90,000 head. The buyers commonly advance one-third or a half of the price for some months. The high price of cattle proceeds from the great consumption in Austria, into which numerous herds are annually sent, particularly from Moldavia, but partly also from Bessarabia and Wallachia. Many of the inhabitants on the Austrian frontier are engaged in this trade. A part of the cattle, and especially the sheep, traverse the Danube for sale in Bulgaria. There are several breeds of horses, and the best, which are those of Moldavia, are bought up in large numbers for the Austrian and Prussian cavalry. Tallow is, next to corn, the principal article of export. The buffalo thrives in Wallachia, and poultry and game of all kinds are in great plenty. Honey, wax, and hare-skins are of the best quality; of the last about 500,000 are annually exported. Timber, yellow berries, butter, cheese, hides, staves and masts, linseed, rapeseed, and bones are the other chief articles of export. The Moldavian oak timber, which is finer than the Wallachian, is well calculated for the construction of vessels, and many of the Turkish ships are built of it, and fitted out with masts and ropes of Moldavian growth and manufacture. The yellow berries are inferior to those of Smyrna, and only in demand when the crop of Asia Minor is deficient.

Manufactures and Trade.—Coarse woollen cloth, hats, earthenware, common linen fabrics, glass, jewellery, and saddlery are made, and there are estimated to be about 5,000 factories of different kinds in the two principalities, inc. distilleries. But, for the most part, manufactured goods are imported from other parts of Europe, in return for the raw produce of the principalities. Galacz and Ibraila are the grand centres of the trade of the provs., and the points whence imported goods are sent to Jassy and Bucharest. Coffee, sugar, spices, oil, rum, lemons, and lemon juice, oranges, and wines are the principal imports. Cotton and woollen

goods, earthenware, and hardware, are brought chiefly from England and Germany, and Russia supplies the principalities with large quantities of furs, taking in return spirits, wines, and specie.

People and Condition.—Notwithstanding the various irruptions of the Goths, Gepidæ, Lombards, Huns, Tartars, and Turks into these provs., the inhabs. at the present day appear to be, with comparatively little intermixture, the descendants of the ancient Dacians, to whom, as represented on Trajan's column at Rome, both in features and costume, the modern Wallachs bear a remarkable resemblance. They still call themselves *Roumuni*, or Romans, and their country *Zura Rouman-Esha*. It is a curious fact, that in a prov. which was among the last annexed to the Roman empire, and in a situation more exposed than any other to the irruptions of invaders from the E., the common dialect now spoken contains, together with many Slavonic and Greek terms, a very large infusion of purely Latin words; so much so that a stranger speaking in Latin is generally understood by the natives. In appearance the common Wallach presents a decided difference from either Magyar, Slave, or German. In height he is below the medium, and generally rather slightly built and thin. His features are often fine, the nose arched, the eyes dark, the hair long, black, and wavy; but the expression is too often one of fear and cunning to be agreeable. The dull, heavy look of the Slovak is seldom seen among them, but still more rarely the proud self-respecting carriage of the Magyar. The long-continued misgovernment to which the Wallachians and Moldavians have been subject has corrupted their morals, weakened their energies, and given them most of the vices of slaves. All the worst consequences of Turkish despotism are exhibited in these provinces. Though not without hospitality, and some other redeeming qualities, the inhabs. are treacherous, revengeful, indolent, and often cowardly. The women, indeed, on whom most part of the labour devolves, do not share in the idleness of the men; but their industry exhibits much want of method and thriftiness, and 'to be as busy as a Wallach woman, and do as little,' is a proverbial comparison among the German settlers in Transylvania.

The peasants' dwellings throughout the country are all built in the same style and of the same size. The walls are of clay, and the roofs thatched with straw, neither of which is calculated to protect the inmates from the inclemency of the weather. In winter the people retire to caves under ground, kept warm by fires made of dried dung and branches of trees, and which, at the same time, serve for cooking their scanty food. Each family, however numerous, sleeps in one of these subterranean habitations, their beds consisting of a piece of coarse woollen cloth, which serves in the double capacity of mattress and covering. These under-ground dwellings have, in fact, been the winter residence of the inhabs. of Scythia from the remotest antiquity, and have been admirably described by Virgil:—

*'Ipsi in defossis specubus secura sub altâ
Otia agunt terrâ, congestaque robora totasque
Advolvere focis ilmos, ignique dedere.
Hic noctem ludo ducunt, et pocula lati
Fermento atque acidis imitantur vitæ sorbis.'*

The ordinary food of the peasants consists of the flour of Indian corn mixed into a dough with milk. For the first few days after Lent some indulge themselves in meat, but the greater part cannot afford this, and content themselves with eggs fried in butter. In their holidays, which are multiplied to an absurd extent, they spend

most of their time in the village wine-houses, where they amuse themselves with dancing and witnessing the vagaries of gipsies. They are no longer *adscripti glebæ*; and if dissatisfied with their masters, may, on giving due notice, quit their habitations and pass over to the estate of another, with their families and movables: this, however, is more an apparent than a real advantage, and the peasants are still in a very oppressed condition. The gipsies continue in a state of partial slavery. Some are employed as domestic servants; the rest are suffered to stroll about the country, breeding cattle or horses, manufacturing wooden and iron utensils, or employing themselves as showmen and musicians. For this liberty they bind themselves not to quit the country, and pay an annual tribute of 80 piastres per man to the government.

The nobility and clergy are in general exempted from taxes for the service of the state, and from the demands of private creditors. They are in consequence overbearing, extravagant, and dissolute. Their education has hitherto been little superior to that of the common people; and though ostentations in their dress and equipage, their manners present little refinement. In Moldavia, which is the most civilised of these provs., the great landed proprietors bestow considerable attention upon the management of their estates; but in Wallachia these are mostly left to the care of agents. The boyars, who hold no place under government, spend their leisure in absolute idleness, or in visiting each other, to kill time. 'They have,' says a traveller, 'adopted indiscriminately the vices, without inheriting the vivacity, of the Greeks.' This statement applies, however, rather to their past than to their present state. Of late years some improvements have been introduced; and though society is still very backward, it is, at all events, superior to what it was under the Turkish regime.

Government.—For a lengthened period these provs. were governed by *vaiivodes*, or princes appointed by the sultan from among the Greeks of Constantinople; and, during the continuance of this system, the country was a prey to every species of abuse. Since 1829, however, they have been nominally only under the sovereignty of Turkey, being really under the protection of Russia. The union of the two principalities of Wallachia and Moldavia was granted by a firman of the sultan, dated Nov. 12, 1861, but provisionally only for the lifetime of the former ruler of both countries, Colonel John Couza, elected hospodar of the principalities in 1859, which office he held till 1866, when he was succeeded by Prince Charles of Hohenzollern. The union of Wallachia and Moldavia, under the name of 'Roumania,' was solemnly proclaimed at Bucharest and Jassy, on December 23, 1861.

The present constitution, drawn up by Colonel Couza, was submitted to the vote of the people, May 10–14, 1864, and accepted by 682,681 votes against 56,918. This constitution vests the legislative power collectively in the prince, a senate, and a chamber of deputies. The senate consists of 64 members, one-half of whom are nominated by the prince from among persons who have held the highest functions in the country, or who possess an annual income of 800 ducats, or 360*l.* The other 32 are elected from the members of the general district councils, and nominated by the prince from a list laid before him of three members for each of the 32 districts. The 64 members of the senate are renewed every three years in the proportion of one-half. The chamber of deputies consists of 160 members, of

whom 85 for Wallachia and 75 for Moldavia. The members are chosen by indirect election, the first voters nominating electors, and these, in their turn, the deputies. Voters are all Roumans, aged 25 years, who can read and write, and prove the payment of annual taxes to the amount of 4 ducats, or 1*l.* 16*s.* each. Eligible as deputies are all Roumans aged 30, and possessing a yearly income of 200 ducats, or 90*l.* The prince has an absolute veto over all laws passed by the chamber of deputies and the senate. The executive is in the hands of the reigning prince, assisted by a council of five ministers.

Wallachia is divided into 18, and Moldavia into 13 districts, each of which has a prefect or governor, a receiver-general of taxes, a civil tribunal, consisting of a president and two other judges; and Moldavia has a director of police and a town council in each municipality. Judges are removable at the pleasure of the superior authorities. The legal codes are founded upon the civil law and the customs of the principalities; but though the system of jurisprudence has been much amended, many reforms remain to be effected, especially in the administration of the laws, which is said to be most corrupt. Nearly all the population belong to the Greek church, and every village has a small church or chapel, with one or more priests, who act as curates. The ecclesiastics of this order are chosen from among the people, from whom they are little distinguished in appearance, and whose avocations they follow when not engaged in their clerical functions. The generality of them can neither read nor write, and merely recite the formulae of their service from memory: they have, however, an unbounded influence over the ignorant pop. of these countries. There are many large and rich monasteries, and 4 or 5 seminaries for the education of the superior clergy.

Public instruction, though still backward, appears to have advanced since 1832. Colleges and Lancastrian schools have been established in the principal towns, and the latter have by this time probably spread into the rural districts. The higher classes in these provs. have set about improving their national dialect with remarkable vigour; and it appears probable that their language will ultimately be rendered much nearer akin to the ancient Roman than even the Italian. A printing-press at Bucharest is in active employment, and translations of foreign as well as original works are continually being produced by native authors. This is a consequence, and by no means the only salutary one, that is likely to follow the enfranchisement of the principalities.

The *military force* is organised on the plan of the Russian army, and the staff officers are principally Russians. The militia is formed by the peasantry, in the proportion of 2 men for every 100 families; but along the banks of the Danube all the inhabitants capable of bearing arms are organised into a military force, employed partly on the quarantine service, and partly and principally as a national or civic guard. The troops and militia of all descriptions amount in Wallachia to about 45,000, and in Moldavia to about 16,000 men. There is no artillery, nor are there any fortresses of much importance in either prov.

The public revenues are derived from the capitation tax of 30 piastres (the piastre is about 3*d.* sterling) per head on the rural pop.; from 30 to 120 do. a year on the manufacturing classes, and 60 to 240 do. on merchants; from customs duties; government lands and rights of pasturage, fees, fines, and salt monopoly; and, in Moldavia, from a tax on the incomes of the clergy. The revenue for

1864, according to the ministerial budget estimates, amounted to 2,400,000*l.*, and the expenditure to 3,400,678*l.*, leaving a deficit of 1,000,678*l.* Wallachia has to pay an annual tribute of 25,000*l.*, and Moldavia of 15,000*l.*, to the Turkish government.

History.—Since the conquest of this country by Trajan, it has never ceased to be under foreign dominion. It was alternately in the power of the barbarians and the Greek emperors till the 13th century, when it appears to have been occupied by the Hungarians. Early in the 15th century it was conquered by the Turks, to whose empire it has since been generally tributary, but the war of 1828 between Turkey and Russia entirely destroyed the influence of the former, and rendered the latter paramount.

WALLINGFORD, a parl. and mun. bor., market town, and par. of England, co. Berks., hund. Moreton, on the Thames, 12½ m. NW. Reading, and 47½ m. W. London by Great Western railway. Pop. of parl. bor. 7,794 in 1861. The old parl. and mun. bor. were co-extensive with four small pars., having an area of 370 acres; but the modern parl. bor. includes several additional pars. partly in Berks, and partly in Oxfordshire, having an aggregate area of about 18,000 acres. The town, three miles from the main road, between London and Oxford, is pretty well built, paved, and lighted with gas, and, for its size, contains a considerable number of neat private dwellings and a few of a superior character. The river is here crossed by a handsome stone bridge, 300 yds. in length, with nineteen arches and four drawbridges, built in 1809, upon the site of a former structure of the same description. St. Mary's church has a fine tower, crowned with pinnacles, which appears to have been erected in 1658: the living, a rectory, worth 148*l.* a year, is in the gift of the crown. St. Peter's church, a handsome edifice, rebuilt at the beginning of the century, is surmounted by a spire. There are places of worship for Friends, Independents, Wesleyans, and Baptists. The market house and town-hall are respectable buildings. Among numerous charitable institutions are the free grammar-school, founded in 1659, and several almshouses. Wallingford is a bor. by prescription, its earliest existing charter being a copy of one dating from the reign of Henry I. It has returned two mems. to the H. of C. since the 28th of Edw. I.; the right of voting, previously to the Reform Act, having been vested in individuals paying church and poor rates. Registered electors 335 in 1865. Under the Mun. Reform Act, it is governed by a mayor, four aldermen, and twelve councillors, and other officers. It has a commission of the peace, court of record, court leet, and a gaol.

WALSALL, a parl. and munic. bor. and par. of England, co. Stafford, hund. Offlow, on a small tributary of the Tame, in the centre of one of the principal coal and iron districts, 7 m. NW. of Birmingham, and 123 m. NW. London by London and North Western railway. Pop. of par. 39,690, and of parl. bor. 37,760 in 1861. Area of par. 7,920 acres, all of which is included in the parl. bor., except an outlying portion called Walsall Wood. It is situated on the declivity and summit of a low hill, and is pretty well built, having the appearance of a compact and flourishing town. The main streets are broad, well paved, lighted with gas, and well supplied with water; though there is but little that is prepossessing in their general appearance. In the environs, however, there are many handsome villas, with some picturesque scenery. Bloxwich, about 2 m. N. from the town, but included in the parl. bor., is a populous village, the inhabs. of which, like those of Walsall, are mostly

occupied in the hardware manufactures. The parish church occupies a commanding situation on the top of the hill: it is an ancient, spacious, cruciform structure, with a tower surmounted by a lofty spire; and was thoroughly repaired in 1821. The living, a vicarage worth 368*l.* a year, is in the gift of the Earl of Bradford, lord of the manor. St. Paul's church, a handsome Grecian edifice, completed in 1826, is a perpetual curacy worth 50*l.* a year. There are several other churches, and places of worship for Independents, Wesleyans, and Unitarians, with two Catholic chapels, one of which is a handsome Greek building. The town has also assembly rooms and a free library, erected 1859, in the Italian style. The grammar school, founded and endowed by Queen Mary, in 1557, and rebuilt in 1850, is open to all the boys of the parish, has an actual income of 780*l.*; and subsidiary schools, dependent on the principal, have been established in different parts of the par. It has also an English school in which 120 boys are instructed; a blue-coat charity; a National and several Sunday-schools; and numerous charitable benefactions for the relief of the poor. In the time of Henry VI. an endowment was left for the annual distribution of 1*d.* to every person in the par.; but, in 1825, this endowment was judiciously appropriated to the erection and maintenance of 11 almshouses. Walsall is said to have been a bor. by prescription: its earliest existing charter was granted by Henry VI. Under the Municipal Reform Act it is divided into three wards, and is governed by a mayor, 5 other aldermen, and 18 councillors. The Reform Act conferred on it, for the first time, the privilege of sending one member to the H. of C. Reg. elec. 1,219 in 1865.

It has a commission of the peace, a weekly court of petty sessions, and a county court. Its command of coal and iron has made Walsall a considerable seat of the hardware business: the manufacture of saddlers' ironmongery, that is, the making and plating of bridles, spurs, and stirrups, the mountings for coach and carriage harness, being the staple employment of the town. It has also some brass and iron foundries, and a considerable trade in malt. Market days, Tuesdays. Fairs, 24th Feb., Whit-Tuesday, and the Tuesday before Michaelmas.

WALSHAM (NORTH), a market town and par. of England, co. Norfolk, hund. Tunstead, on a level, about 6 m. from the sea, and 13 m. NNE. Norwich. Area of par. 4,010 acres. Pop. of do. 2,896 in 1861. The town consists of three streets which meet so as to form an irregular triangle. The par. church is a large venerable old edifice. Its tower fell down in 1724; but it has a fine south porch of flint and stone, and a font with a very rich wooden cover of tabernacle work. The vicarage is annexed to the rectory of Antingham, the livings being, together, worth 336*l.* a year: patron, the crown. Here are several dissenting chapels, a free grammar-school, with an income of nearly 250*l.* a year, at which Lord Nelson was partly educated; a Sunday-school, with a small endowment, and several minor charities. The market-cross, originally erected in the reign of Edward III., was rebuilt in 1600. Two annual courts-baron are held here, and petty sessions for the hund. by the co. magistrates. Market day, Tuesday. Fairs three times a year, chiefly for cattle and the hiring of servants. In 1600, this town was visited by a most destructive fire, which consumed 118 houses, besides barns and stables. On Walsam Heath, near the town, is a stone cross, erected to commemorate a victory of Henry Spencer, bishop of Norwich, over a band of rebels in 1382.

WALTHAM ABBEY, or HOLY CROSS, a market town and par. of England, on the W. border of the co. of Essex, hund. Waltham, on the Lea, 11½ m. NNE. London, on the Great Eastern railway. Area of par. 11,870 acres. Pop. of do. 5,044 in 1861. The town, originally founded in the time of Canute, consists chiefly of one spacious and irregular street. The church was formerly the nave of the church of an opulent and famous monastery, founded here by Harold II., of which there are now but few remains. This venerable relic, though much disfigured and mutilated, contains some most interesting specimens of the ornamented columns, semicircular arches, and other characteristics of the Norman style of architecture. It is about 90 ft. in length, by about 48 ft. in breadth. At the W. end is a heavy square embattled tower, 86 ft. in height; but this is comparatively modern, and bears the date of 1558. The inside of the church bears witness to the iconoclastic zeal of the Reformers, and to the bad taste and miserable parsimony of those by whom they have been followed; the ornamental parts having been defaced and whitewashed, and the brasses torn from the gravestones. Harold, and his two brothers slain with him at the battle of Hastings, were interred in this church. The living, a curacy worth 237*l.* a year, is in the gift of the Earl of Norwich. The Baptists and Wesleyans have also places of worship. The educational and charitable institutions comprise a free school for 20 boys and 20 girls, with an endowment producing about 150*l.* a year; another endowed school, for the education of five boys, and several bequests for the support of Sunday-schools, almshouses, and the general relief of the poor.

The revenues of the monastery amounted, at its dissolution in 1539, to 900*l.*, according to Dugdale, and to 1,080*l.* according to Speed. At present, the town derives its entire importance from the gunpowder mills established here on account of government. These, which were originally acquired from private parties in 1787, consist of 4 mills; the establishment is, in all respects, in the most efficient state, and the powder produced of the very best quality. During peace the consumption of powder by government amounts to about 10,000 barrels a year, of which about 8,000 are supplied by the works now under consideration. At Enfield Lock, about 2 m. below Waltham, a manufactory of small arms is also carried on upon account of government.

In the hamlet of West Waltham, or Waltham Cross, about 1 m. W. from Waltham Abbey, in Hertfordshire, is one of the stone crosses erected by Edward I., at the different places where the corpse of his beloved wife, Queen Eleanor, rested on its way from Hareby, near Grantham, where she died, to Westminster Abbey. Only 3 of these crosses now remain. It had originally been a very fine structure; but the ornaments are now much defaced.

WALTHAMSTOW, a village and par. of England, co. Essex, hund. Becontree, on the Lea, a tributary of the Thames, 5 m. NE. London, on the Great Eastern railway. Area of par. 3,690 acres. Pop. of do. 7,137 in 1861. The village, on the borders of Epping Forest, is formed by the union of several hamlets; the houses, among which are many villas and country seats, being generally detached, and interspersed with trees and gardens. The parish church, built on an eminence, is a spacious structure in a mixed style of architecture, with a tower at its W. end; it was repaired and enlarged in 1817, and has several ancient monuments. The Unitarians, Independents, and other dissenters have chapels. The free school, founded in

1542, has an endowment yielding 85*l.* a year. It has also national and infant schools, with numerous well endowed almshouses, and benefactions to a considerable amount, for the relief of the poor. Some copper mills and other works are established in this par., on the banks of the Lea. The par. has an exclusive local jurisdiction, and is governed by a council of 17 members, presided over by the vicar and churchwardens. Courts leet and baron are held here when required.

WANDSWORTH, a large village and par. of England, co. Surrey, hund. Brixton; on the Wandle, near its confluence with the Thames, 5 m. SW. London, on the London and South Western railway. Area of par. 1,820 acres. Pop. of do., 13,346 in 1861. Wandsworth consists principally of one broad thoroughfare, between two eminences called the E. and W. hills. The old church, which was mostly rebuilt in 1780, is a plain brick edifice with a heavy square tower at its W. extremity; the living is a vicarage worth 840*l.* a year. The new church of St. Anne, erected by act of parliament in 1824, is an elegant edifice of Grecian architecture, with a handsome portico and a steeple of two circular arches. Here also are meeting-houses for Friends, Baptists, Independents, and Wesleyans. The first Presbyterian congregation in England was established here in 1572. The free endowed school, founded in 1710, has been incorporated with the national school, and affords instruction to above 200 boys and 100 girls, to some of whom clothing is supplied. It has also a Lancastrian school, in which more than 200 children are educated. A school of industry, attended by 40 girls, and various other charities, among which those of Alderman Smith, a native of the village, who died in 1627, are the most valuable. The manufactures of Wandsworth are considerable; that of hats was introduced by the French refugees towards the end of the 17th century; and there are works for making coach and livery lace, dyeing (especially in scarlet), with corn, oil, iron, and white lead mills, vinegar works, and distilleries. Petty sessions for the hund. are held weekly, and there is a county court. Fairs on the first 8 days of Whitsun week, for horses, cattle, pigs, and toys.

WANTAGE, a market town and par. of England, co. Berks., hund. Wantage, on a small trib. of the Thames, at the E. extremity of the Vale of the White Horse, 22½ m. WNW. Reading, and 60½ m. W. London, by Great Western railway. Pop. of town 3,064, and of par. 3,925 in 1861. Area of par. which includes the hamlets of Charlton and Grove, 7,580 acres. The town is irregularly built at the intersection of the high roads from Hungerford to Oxford, and from Farringdon to Wallingford, which form its principal streets. The church, a handsome cruciform structure, has a square embattled tower rising from its centre, and some fine monuments. The living, a vicarage, worth 503*l.* a year, is in the gift of the dean and canons of Windsor. It has also places of worship for Independents and Wesleyans; a free grammar-school, with an income of about 200*l.* a year; some almshouses, founded in 1650, with an endowment of 100*l.* a year, and Sunday-schools. The town lands produce an income of about 450*l.* a year, which is spent on the relief of the poor, the repair of highways, and the support of a school. Sacking, twine, and tarpaulins are manufactured on a small scale. The market is celebrated for its fine corn, a great deal of the best seed-wheat being brought thither by the Vale farmers. Its trade is facilitated by a branch of the Wilts and Berks canal, which comes up to the town. Wantage was made a bor. after the Con-

quest; but it no longer retains that distinction. A manorial court is, however, held in it once a year, and petty sessions for hund. every Saturday.

WARDEIN (GROSS or GREAT; Hungar. *Nagy-Varad*), a fortified town of Hungary, co. Bihar, of which it is the cap.; on the Körös, towards the borders of Transylvania, 39 m. SW. Debreczin, on a branch line of the railway from Pesth to Debreczin. Pop. 23,380 in 1858. The town is the residence of a R. Cath. and a united Greek bishop, and the seat of the co. assembly, council, and commissariat department. It has a royal academy, many other superior schools, an abbey, and various religious establishments, with manufactures of silk stuffs and earthenware. The town has wide, well-built streets of one-storied houses, and extensive market-places, quite to the taste of the Magyar, who loves not the narrow lanes and high houses of his German neighbours. But the glory of Gross Wardein is in its gilded steeples, its episcopal palace, its convents, and its churches; and, although of the latter, the 70 which it formerly boasted are now reduced to 22, they are quite sufficient for the inhabs.

WARE, a market town and par. of England, co. Herts., hund. Braughin, on the great N. road, and on the Lea, 18½ m. N. London, by road, and 24 m. by Great Eastern railway. Area of par. 4,480 acres. Pop. 5,397 in 1861. The town consists chiefly of one thoroughfare, nearly a mile in length, and lined in general with substantial and well-built houses. The church is a large cruciform structure, mostly in the decorated and perpendicular styles; it has an embattled tower at the W. end, and within are several fine monuments, and a handsome front. The living, a vicarage, annexed to that of Thundridge, is in the patronage of Trinity Coll. Cambridge. Here are also chapels for Independents, Wesleyans, and Friends. The market-house, supported on arches, comprises a good assembly-room. The educational and charitable institutions include a free grammar-school, of very old foundation, attended by about 30 pupils; another free school, with a small endowment, established in 1884: a national, and two other schools, chiefly supported by subscription; numerous almshouses, a lying-in-charity, and funds for distribution among the poor, yielding an income of 330*l.* a year. Ware has a considerable trade in corn, and malting is extensively carried on. It is governed by 3 constables and 4 headboroughs; petty sessions, for the division, are held weekly, and a court-baron once a year. Market-day, Tuesday. Fairs twice a year for horses and cattle.

Chadwell spring, near the town, assisted by a cut from the Lea, gives rise to the New River, an artificial stream brought from Hertfordshire, for the supply of water to the metropolis. Though the source of the New River, in a direct line, is not more than 20 m. from London, its course, including its windings, is nearly 40 m. This important work was completed in 1613, principally by the exertions of the famous Sir Hugh Middleton. Though very unproductive at first, it has since been a source of vast wealth to its proprietors, as well as of advantage to the city.

WAREHAM, a parl. and munic. bor., market town, river-port, and par. of England, co. Dorset, hund. Winfrith, in Blandford div., on a peninsula between the rivers Frome and Piddle, about 1 m. above their confluence with Wareham harbour, the most westerly arm of Poole harbour, 30 m. SSW. Salisbury, and 125 m. SW. London, by London and South Western railway. Pop. of bor. 6,694 in 1861. The modern bor. includes the whole of the 3 pars., portions only of which were

comprised in the ancient bor., together with those of Corfe Castle and Bere-Regis, and parts of two other adjacent parishes. The site of the town shelves gradually towards the S., and it is mostly surrounded by flat marshy land. Having been nearly destroyed by fire on the 25th July, 1762, it has been built on a regular plan, and consists chiefly of 2 wide streets, intersecting each other at right angles. The houses, built of brick, and tiled or slated, are generally in good condition. It is surrounded by a remarkable ancient mound, the space between which and the town is now laid out in market gardens. Each of its rivers is here crossed by a bridge, that over the Frome being a handsome structure, erected in 1779. Of 8 churches, which formerly existed here, only 1, St. Mary's, is now used for public worship, though 2 more, Trinity and St. Martin's, are made use of for other purposes; the former being converted into a national school, and the latter being used for reading the funeral service. St. Mary's, a spacious and ancient edifice, originally attached to a priory, is built in a mixed style, though principally of the decorated character. It has a handsome tower, and contains some ancient monuments. All the livings of Wareham are now united in one rectory. Two more ancient churches, that had fallen to decay, were taken down within the last century, and on the site of one of these the present town hall has been erected. The Independents, Wesleyans, and Unitarians have places of worship. The educational and charitable institutions comprise a national school, held in the old church of the Holy Trinity; a small endowment for the education of 30 poor children; almshouses for 6 men and 4 women, and some minor charities.

The trade of Wareham consists chiefly in the export of the fine clay found in its neighbourhood to the Staffordshire and other potteries, and in the shipping of vegetables from the market gardens round the town for Poole and Portsmouth. A good many of the inhabs. are also employed in knitting stockings, and in the manufacture of shirt buttons. The port, which was formerly considerable, is now nearly choked up, being only accessible to vessels of from 25 to 30 tons; but vessels of 60 tons ascend to within about 1 m. of the town, and those of 200 tons may anchor at Russell's quay, about 3 m. from the town. The borough returned 2 mems. to the H. of C. from the 13th of Edward I. down to the Reform Act, the right of voting being exercised, since 1747, by the inhabs. paying scot-and-lot; but, under the act now referred to, it returns only 1 mem. along with Corfe Castle, and Bere-Regis. Reg. electors, 351 in 1865. The bor. has a commission of the peace, a court leet, held annually; and a court of record, opened monthly, but now of little utility. Market day, Sat. Fairs 9 times a year, mostly for cattle, cheese, and hogs.

WARMINSTER, a market town and par. of England, co. Wilts, hund. Warminster, on the Willey, at the W. extremity of Salisbury Plain. 20 m. NW. Salisbury, 15 m. SE. Bath, and 114 m. W. London by Great Western railway. Pop. of town, 3,675, and of par. 5,995 in 1861. Area of par. 5,450 acres. The town consists chiefly of one spacious, clean, and well paved thoroughfare, nearly 1 m. in length, the houses being mostly of freestone. The church of St. Denis is a spacious structure, in the perpendicular style, with a square central tower; the living, a vicarage worth 324*l.* a year, is in the gift of the bishop of Salisbury. The new church, erected in 1830, partly by subscription, and partly by a grant from the parliamentary commissioners, is a perpetual curacy,

worth 100*l.* a year, in the gift of the vicar of Warminster. Besides a chapel of ease, there are several dissenting places of worship; a free endowed grammar-school, affording instruction to 20 boys, with national and Lancastrian schools, supported by subscription. Warminster had formerly the most extensive trade in malt of any town in the W. of England: and this branch of industry, though it has declined, is still largely carried on. The manufacture of broad cloths and kerseymeres has been, in a great measure, superseded by that of silk, in which many women and children are employed. The trade in corn is considerable, the market being one of the most extensive in this part of the country. The town is under the jurisdiction of a high constable, deputy constables, and tything men, chosen at the annual manorial court. The quarter sessions for the co. are held here in July; petty sessions monthly, by the co. magistrates: and a court of requests for the recovery of debts under 5*l.*, is held alternately in this town and Westbury. Warminster is supposed to have been a Roman station, from the discovery of coins, weapons, a tessellated pavement, and other antiquities in the vicinity. Market day, Saturday; fairs, 3 times a year, for cattle, sheep, hogs, and cheese.

The manor and lordship of Warminster is the property of the Marquis of Bath; and about 4½ m. W. from the town, on the confines of Somersetshire, is Longleat House, the magnificent seat of that nobleman. The park in which it is situated is of great extent, and is finely laid out.

WARRINGTON, a parl. bor., market town, and par. of England; co. Lancaster, hund. W. Derby; in a low situation on the Mersey, 17 m. E. by S. Liverpool, and 182 m. NW. London by London and North Western railway. Pop. of munic. bor. 26,431, and of parl. bor. 26,947 in 1861. The parl. bor. comprises the townships of Warrington and Lachford, with portions of that of Thelwall. The town principally consists of four main streets, one or two of which are spacious, and contain some handsome buildings; but the other streets are for the most part narrow. The most important public buildings are the sessions-house erected in 1820; the market-hall, over which are the assembly rooms; three cloth halls, the public museum and library, erected in 1857, a public hall, opened in 1862, and a theatre. The par. church, which is of Saxon origin and existed at the time of the Conquest, is a large massive cruciform structure. The tower, which rises from the intersections of the transept, was rebuilt in 1696; the interior of the church, which is lofty and handsome, contains two chapels, and some fine ancient monuments. Beneath the chancel has lately been discovered an ancient crypt, now converted into a vestry. At the entrance of the churchyard are two handsome gates. The living, a rectory, has under it the perpetual curacies of St. Paul and the Holy Trinity. There are 2 R. Catholic chapels, founded severally in 1823 and 1836, and 12 other places of worship for different sects. The free grammar-school, founded by Sir T. Boteler in 1526, has an annual income of between 700*l.* and 800*l.* The blue-coat school, established in 1677, has since received legacies and benefactions amounting to upwards of 2,000*l.*, and has an annual income of 450*l.*; 30 boys and 20 girls, children of settled inhabitants of the town, are lodged, maintained, and clothed in the building, and 170 boys and 40 girls admitted as day scholars. A general subscription library was established in 1758. A society was formed here early in the last century, for the purpose of affording assistance to widows and orphans of clergy-

men in the archdeaconry of Chester; and the relief dispensed by it amounts at present to about 1,000*l.* a year. A handsome building, in the Elizabethan style of architecture, has been erected for the education of the orphan daughters of clergymen. A dispensary and branch of the Royal Humane Society are among the other numerous charities, and there is a small but commodious infirmary, to which two wards for cases of fever are attached.

The appearance of Warrington is less bustling and animated than formerly. Until the opening of the railway it was the great thoroughfare between Manchester and Liverpool; 70 public carriages daily passing through it between these great emporiums. But its traffic with the above towns is, notwithstanding, very considerable; for, though not strictly speaking a port, it possesses by means of the Mersey and Irwell Navigation, many of the advantages of a port. At spring-tides the Mersey rises from 10 to 12 ft. at Warrington Bridge, and vessels of from 70 to 100 tons burden navigate the river up to this point. It is also a station in the great NW. railway from London to Glasgow, and is consequently connected with all parts of the kingdom.

Warrington is distinguished by the number and variety of its manufactures. The making of sail-cloth and sacking was formerly carried on here upon a very large scale, but it is dwindled to insignificance. At present, among the many that are carried on, cotton spinning and power loom weaving occupy a prominent place. The refining of sugar, though not entirely relinquished, is not a leading branch of industry; but the soap manufacture continues to be of great importance. The manufacture of flint and plate glass is carried on upon a large scale, and has long ranked among the principal businesses of the town. Warrington is also the principal seat of the manufacture of 'Lancashire tools,' under which designation are comprised files of the very best quality, chisels, gravers' tools, watch and clock makers' tools, and in some of its factories may be seen collections of the articles in question of unrivalled excellence. Pin-making is also carried on; and Warrington has long been celebrated for its malt and ale. The soil in the neighbourhood being especially suitable for horticultural purposes, gardening is well understood and successfully practised. The government of the town is vested in police commissioners and constables chosen annually in October at the court leet of the lord of the manor. The Reform Act conferred on Warrington, for the first time, the privilege of sending 1 mem. to the H. of C. Reg. electors, 783 in 1865. Market days, Wed. and Sat. Fairs, 18th July and 30th Nov., each lasting 10 days, for horses, cattle; and cloth, and every other Wed. for cattle.

WARSAW (Pol. *Warszawa*, Fr. *Varsovie*), the cap. city of Poland, palat. Masovia, on the Vistula, 650 m. SE. Petersburg, on the railway from St. Petersburg to Vienna. Pop. 230,225 in 1864. The city which, with its gardens and suburbs, covers a great extent of ground, is on the left or W. bank of the river, which is here about as broad as the Thames at Westminster Bridge, being connected with the suburb of Praga, on the right, by a fine iron bridge, resting on granite piers. Warsaw, being situated partly in a plain and partly on an ascent gradually rising to the river's bank, has a magnificent appearance from the Petersburg road. But the impression of grandeur is not supported on entering the town. It has, indeed, many fine palaces, public buildings, and noble mansions, and, latterly, its private houses have been im-

buildings of wood. But its streets, though spacious, are badly paved, badly lighted, and dirty; the greater part of the houses in the city, and still more in the suburbs, are mean and ill constructed, above one-fourth part of their number being of wood; and the whole town exhibits a painful contrast of wealth and poverty, civilisation and barbarism, luxury and misery. The suburb of Praga, on the E. bank of the river, once extensive, is now all but deserted. There are still, however, several other suburbs of large extent; and those adjacent to the city proper are included within its rampart and ditch.

The principal public building is the *Zamek*, a huge edifice, formerly the palace of the kings of Poland, and that in which the emperor still resides when he visits Warsaw. The hall of the Polish diet, a splendid gilt ball room, and the national archives of Poland, are in this building; but the fine paintings of Canaletti, with the library and other treasures, have been removed since 1831 to the Russian capital. There are several other royal palaces. That called the palace of Casimir, which was appropriated to the university, has in its square a statue of Copernicus. The Palais de Saxe is a large building in one of the finest squares.

At the back of this palace are the principal public gardens in the interior of Warsaw, which resemble in some respects the park at Brussels, though considerably larger. Another handsome public garden, much frequented at the fashionable hour of 12, belongs to what is called the government palace. This latter is one of the most chaste and really beautiful architectural elevations in the Polish capital. It is strictly in the Italian style, and contains the national theatre, custom-house, high tribunals, and offices of the minister of the interior. The palace of the minister of finance, which is quite modern, forms, with the new exchange, a very imposing object at the end of the street leading to the Breslau gate. The Marieville bazaar is a large square, the four sides of which consist of covered arcades, with dwellings for the merchants above, and shops for the merchandise under them; the latter amount to about 800, besides several warehouses. A great number of churches are to be found in the city; some of which are of really colossal dimensions, as the cathedral of St. John and the church of the Holy Cross. In the former are an altarpiece of great merit by Palma Nova, and a large standard wrested from the Turks by Sobieski at the siege of Vienna. The Lutherans have also a magnificent church, erected at an expense of 25,000*l.*, and superior in beauty and boldness of design to all the Catholic churches in the place, having a dome and tower of prodigious elevation. Which way soever a traveller turns, he cannot fail to pass some one of the monuments which stand in the squares to commemorate the reign of a sovereign, or the achievements of a Polish warrior. The colossal statue of Sigismund III., cast in bronze, gilt, and placed on a lofty pillar of marble of the country, produces a very good effect; and the equestrian group in bronze of Poniatowski, by Thorwaldsen, is another monument worthy of admiration.

Independently of the public gardens, Warsaw may be said to have in its vicinity some of the finest drives and promenades in Europe for width and extent. The numerous avenues of the Ujazdow, planted with lofty lime and chesnut trees, are the rendezvous of nearly the entire pop. of Warsaw on Sundays and other holidays, and are admirably calculated for horse and sledge

country residence of Stanislaus Augustus. The palace is built in the Italian style: Bacciarelli's paintings decorate one of the principal rooms; and it has a ball-room, ornamented with colossal statues in white marble; a chapel, with some curious works in mosaic. In the park is a stone bridge, on which is erected the equestrian statue of John Sobieski. The view of the Vistula from the park is very fine; and a large island lying in the middle stream is much frequented in summer by the amateurs of aquatic expeditions.

Among the other public buildings may be specified the Radzivil and Krasinski palaces, the barracks, mint, six hospitals, five theatres, and several good inns. Since the insurrection of 1830, a strong citadel has been erected, partly with the view of protecting, but more of overawing the town. This citadel was built from the produce of a loan raised in Poland; and, in 1835, when the Emperor Nicholas visited Warsaw, in his way from the congress at Toplitz, he distinctly informed the civic authorities that, on the first disturbance breaking out in the city, the guns of the citadel should level it with the ground. The threat was again held out in the insurrection of 1864, and served, in a great measure, to prevent an outbreak in the city. A cast-iron obelisk has been erected in the citadel in honour of the late emperor, inscribed 'To Alexander, the Conqueror and Benefactor of Poland.'

The university of Warsaw, established in 1816, possessed faculties of theology, jurisprudence, medicine, philosophy, belles-lettres, and fine arts, and a library containing, it is said, 150,000 vols. of printed books, exclusive of rare MSS., with an observatory and botanic garden, cabinets of natural philosophy, zoology, minerals, models, and coins, and printing and lithographic presses. But the university no longer exists, having been suppressed subsequently to the ill-fated insurrection of 1863, its fine library being then, also, removed to Petersburg. Of late years there has been a R. Catholic college at Warsaw, with twelve professors; but the adherents of the Russo-Greek church are rapidly increasing here, as in all other countries subject to Russia, and have now a cathedral and other churches in the city. The Jews, of whom there are about 25,000, have several synagogues; the Armenians, too, have their places of worship, and the English have a chapel. Among the educational establishments are numerous superior, special, and elementary schools; all of them being modelled on the new system, and having attached to each a native Russian as a teacher of his own language, a considerable proficiency in which is now an indispensable qualification for holding any public office.

Warsaw has also a deaf and dumb asylum, a musical conservatory, societies of friends of literature and natural science, a Bible society, and some newspapers and other periodical publications. These, however, are subjected to a rigorous censorship, and are, consequently, worth little. Its manufactures comprise woollen and linen cloths, saddlery, leather, carriages of different kinds, ironmongery, paper, and tobacco, with chemical and cotton printing works, and numerous breweries. Warsaw is the great commercial entrepôt for Poland, and has two large annual fairs, in May and Sept., attended by traders from many parts of Europe and Asia.

In comparing this city with Petersburg, an English traveller, Dr. Granville, says, 'There is a notable difference between the general aspect of the inhabs. of Warsaw and those of the cap. h. had just left. The women here are handsomer than the men: at Petersburg the impression I re-

ceived was of an opposite nature. The absence of those semi-Asiatic costumes, which are so prevalent in all the streets of the Russian cap., tends, in great measure, to give to the cap. of Poland a more European aspect; but there is something else that contributes to produce that effect. The Poles are uniformly merry; they are loud chatters, fond of amusement, and as partial to living in the open air, doing nothing, as the Parisian *fainéants* and the *habitués* of the Palais Royal, the Tuileries, the Boulevards, or the Luxembourg; to which class of people I should be tempted to compare them in many respects. They also do business differently: their shops and public places of amusement are more like those of any other European city farther S.; and their *ménage* appears to be much nearer to that of the French than of the Russians.

Warsaw, though a very ancient town, was not the cap. of Poland till 1566, after the union with Lithuania, when the Polish diet was transferred to it from Cracow. The city was occupied by the Swedes in the middle of the 17th century, and surrendered, without opposition, to Charles XII. in 1703. In 1793 the inhabs. expelled the Russian garrison previously in occupation; and the town was successfully defended against the Prussians, in the succeeding year, by Kosciusko. But the suburb of Praga being soon after taken and sacked by the Russians under Suwarow, by whom a large proportion of the inhabs. were put to the sword, the city, threatened with a similar fate, submitted to the conquerors. In 1795, Warsaw was assigned to Prussia: in 1806 it was made the cap. of the grand duchy of Poland; and, in 1815, it became the cap. of the new kingdom of Poland. Warsaw was the principal seat of the ill-fated insurrection of 1831, but remained in the hands of the government in the no less fatal rebellion of 1863-64.

WARWICK, a co. of England, situated nearly in the centre of the kingdom, having NE. the co. of Leicester, E. Northampton, S. Oxford and Gloucester, W. Worcester, and NW. Stafford. It contains 574,080 acres, of which above 500,000 are arable, meadow, and pasture. The northern and largest part of Warwickshire was formerly an extensive forest, and still retains something of its former character, being interspersed with heaths and moors, and sprinkled with woods; but the former have greatly diminished within the present century. The S. portion is in general very fertile. Both the dairy and grazing systems are successfully practised, but the former has been gaining on the latter. The long-horned breed of cattle is preferred for the dairies; the average produce of a cow being about 2½ cwt. of cheese. Short-woolled sheep have been almost entirely banished from this co. The standing sheep stock is supposed to amount to about 350,000 head, and the produce of wool to be between 8,000 and 9,000 packs. Arable husbandry is not so well understood as grazing; and in some districts it is far behind. Wheat, barley, oats, and beans are extensively cultivated. The first is generally drilled; and, when such is the case, it is not a little singular that turnips should be almost everywhere sown broadcast, and beans generally dibbled. The system of top-dressing is more commonly followed in this than in any other co. Estates of various sizes; some very large, and others small. Farms vary from 80 to 500 acres; but the smaller class predominate so much that the average is not supposed to exceed 150 acres. Old enclosures average about 10 acres, new about 15. Leases getting more uncommon, and farms mostly held from year to year. Tenants bound not to exceed three crops

to a fallow; but there is no restriction as to the quantity of wheat sown. Little can be said in favour of the farm buildings. The old houses and offices were sometimes built of timber; sometimes the walls were of stone, and sometimes of mud or clay, or thatched; they are in general injudiciously placed, ill-planned, and inconvenient. The new farm-houses and offices are of brick, covered with tile, and are very substantial: but conveniency is said not to be much studied. There are no open sheds for wintering cattle, nor feeding-sheds for soiling with turnips and other green food. Coal is wrought to a considerable extent at various places; but Birmingham is supplied with coal brought by canal from Staffordshire. Warwick ranks high as a manufacturing co. Birmingham is the principal seat of the hardware manufacture; and nowhere, perhaps, has the combined influence of ingenuity, skill, and capital been more astonishingly displayed than in the immense variety, beauty, utility, and cheapness of the articles produced in this great workshop. Coventry has been long distinguished for its proficiency in the silk trade, particularly in the manufacture of ribands. Needles and fish-hooks are made at Alcester, hats at Atherstone, and flax-mills have been erected at Tamworth and in other places. Principal rivers, Avon, Tame, Alne, and Leam. The Birmingham and Fazely canal runs along the NW. side of the co.; and it is intersected by the Warwick and Birmingham canal, the Warwick and Napton canal, and the Oxford canal: the co. is also intersected by the London and North Western railway and its broad lines. It is divided into 4 hundreds and 4 subsidiary districts, and contains 205 parishes. It sends 10 mems. to the H. of C., viz. 4 for the co., and 2 each for the city of Coventry and the bors. of Birmingham and Warwick. Registered electors for the co., 10,227 in 1865, being 6,710 for the northern and 3,517 for the southern division. At the census of 1861 the co. had 116,351 inhab. houses and 561,384 inhabitants, while in 1841 Warwick had 81,321 inhab. houses and 401,715 inhabs.

WARWICK, a parl. and mun. bor. and par. of England, near the centre of the co. Warwick, of which it is the cap., hund. Knightlow, on the Avon, 2½ m. W. Leamington, and 90 m. NW. London by London and North Western railway. Pop. of bor. 10,570 in 1861. Area of parl. bor., the limits of which were not altered by the Boundary Act, and which is co-extensive with the two parishes of St. Mary and St. Nicholas, 5,360 acres. It stands on an abrupt acclivity on the N. bank of the river, which is here crossed by a handsome stone bridge of a single arch; and is regularly laid out, consisting of two principal thoroughfares crossing each other towards the centre of the town, with a number of smaller cross streets. The principal streets are well built, paved, lighted with gas, kept remarkably clean, and ornamented with several handsome public buildings. The most conspicuous of these is St. Mary's church, which, having been nearly burnt down in 1694, was rebuilt in 1704. It exhibits a singular union of various styles: the square tower, which was designed by Sir Christopher Wren, and is finely proportioned, rises to a height of 130 ft.; it is supported on 4 pointed arches, with a thoroughfare underneath, and crowned with pinnacles. The whole of this church, except the chancel and its adjuncts, is a composition of the greatest barbarity; but the chancel is an uncommonly beautiful specimen of perpendicular

its parts and the excellent execution of its details. The interior is equally beautiful, and there are, on the N. side, a monumental chapel and vestry of very good character; but the great feature of the church is the Beauchamp chapel erected in 1464. It is completely enriched both within and without; its details of the most elegant character and excellent execution, and in very good preservation. It consists of a chapel, of several arches, and a small aisle, or rather passages, on the N. side, between the chapel and the church. In the centre of the chapel stands a very rich altar tomb, with the effigies of Richard Beauchamp, earl of Warwick, whose executors commenced the erection of this chapel, which, however, was not completed until the 3rd Edward IV. There are some other monuments (including a fine one of Dudley, earl of Leicester, favourite of Elizabeth); but others are of much later date, and rather disfigure the chapel than add to its beauty. The living of St. Mary's is a vicarage, in the gift of the corporation of Warwick, worth 800*l.* a year. The church of St. Nicholas is small and plain; the living, also in the gift of the corporation, is worth 218*l.* per annum. Other churches, formerly existed, of which there are now no remains. The Independents, Friends, Wesleyans, Unitarians, and Baptists have meeting-houses.

The court-house in the High Street is a respectable stone building erected in 1780. The county hall, a spacious and handsome edifice, 94 ft. in length and 36 ft. in width, has an elegant stone front supported by a range of Corinthian pillars. In this building the courts of justice are held; and attached to it, on the N. side, is the co. jail, a large and well designed building, surrounded by a strong wall, 23 ft. in height, enclosing nearly an acre of ground. The co. bridewell, in which is a corn-mill (worked by the male prisoners), and the market-house are large and substantial modern structures. It has also a public subscription library and newsroom, and a small theatre.

The glory of Warwick is its castle, the seat of the Earl of Warwick, and the most magnificent of the ancient feudal mansions of the English nobility, still used as a residence. It stands on a rock overhanging the Avon, a little to the SE. of the town. It retains much of its ancient grandeur of appearance, and, uninjured by time, presents an interesting memorial of by-gone ages. Its foundation is attributed to Ethelfleda, daughter of Alfred, in 915; but no authentic trace now remains of the original building. Caesar's tower, 147 ft. in height, supposed to have been built at least 700 years ago, is in a perfect state of preservation. Guy's Tower, 128 ft. in height, and built in 1394, is also nearly perfect; it appears to be of a decorated character; and though very plain, is perhaps the most perfect remains of its kind in existence, and curious alike as to composition and construction. The principal entrance faces the E. side of the town, and the approach to it is a broad winding road cut in the solid rock. Before the front is a disused moat, a stone arch over which has replaced the ancient draw-bridge. On passing the double gateway, the visitor finds himself in the inner court of the castle, surrounded on all sides by lofty embattled walls and ramparts. This castle was formerly a strong fortress; and by means of open flights of stone steps and passages on the tops of the walls there is a line of communication all round the building. The parts of this vast and venerable pile that are occupied by the family are magnificently fitted up, but so as to harmonise, in all re-

The collection of paintings is at once extensive and valuable.

In a greenhouse attached to the castle is the **WARWICK VASE**, one of the noblest remains of ancient art. It is of white marble, and of large dimensions, being capable of holding 136 gallons. Its handles are exquisitely formed of interwoven vine branches. On the body of the vase are the heads of satyrs, bound with wreaths of ivy, the skin of the panther, with the head and claws beautifully sculptured, and other appropriate ornaments. This splendid relic was found at the bottom of a lake, at Adrian's Villa at Tivoli, of which, no doubt, it had formed a principal ornament; and having been purchased by Sir William Hamilton, was consigned by him to his relative the Earl of Warwick, at whose expense it was brought to England, and by whose liberality it has been placed in a situation where it may at all times be seen by the public.

The remains of several monastic establishments exist in and near Warwick; and at the E. and W. extremities of the town are gates, each containing some ancient work with modern additions. Leicester's Hospital, an ancient building at the W. extremity of High Street, was originally a hall belonging to two guilds, and was converted to its present use by Robert Dudley, earl of Leicester, for the reception of 12 poor men, chiefly disabled veterans, and for a professor of divinity as master. In 1811, the clear value of the estates with which it is endowed amounted to 2,000 per annum. In 1818, the master's salary was raised from 50*l.* to 400*l.* a year, and the number of inmates increased to 22. The college school, originally founded by Henry VIII. as a free grammar-school, and endowed out of the revenues of the dissolved monasteries, is open to all the boys of the town. It has two exhibitions of 70*l.* to each of the universities. Of late years it had fallen into a state of decay; but recently the number of youths educated here has increased, and at present the school is comparatively prosperous. Here is also a charity-school, founded and endowed for the instruction of 39 boys and 36 girls, a national school, school of industry, and not less than 40 almshouses. Large funds are vested in the hands of the corporation for distribution among the poor.

The manufactures, which are unimportant, comprise a few descriptions of cotton and woollen goods. There are several large malting houses, and lime, timber, and coal-wharfs, on the banks of the Stratford canal, which comes up to the N. part of the town, and by which it communicates with Oxford, Birmingham, and the Severn. Warwick is a bor. by prescription; its earliest charter dates from the 45th of Henry III., but it was not regularly incorporated till 1553. Under the Municipal Reform Act it is divided into 2 wards, and is governed by a mayor, 5 aldermen, and 18 councillors. Quarterly courts of session are held for all offences not capital; a court-leet annually; and there is occasionally a court of record for the recovery of debts under 40*l.* The bor. has returned 2 mems. to the H. of C. since the reign of Edward I., the franchise having been vested, previously to the Reform Act, in the payers of church and poor rates. Registered electors, 652 in 1865.

Warwick is conjectured by Dugdale and other writers to have been a Roman station; but there are no proofs of its having existed before the Saxon times. It was in great part destroyed by fire in 1694. Market-day, Saturday. Fairs, twelve times a year; mostly for horses, cattle, and cheese.

WASHINGTON, a city of the U. States, being the cap. of the Union and the seat of the general

legislature and government, in the federal distr. of Colombia, on the Potomac, at the confluence of the Anacootia, 210 m. SW. New York, with which it is connected by railway. Pop. 51,122 in 1860. The plan of the city is laid down upon a magnificent scale, and though it has not increased so rapidly as was expected, it is now of very respectable dimensions. The streets cross each other at right angles, and are intersected diagonally by *avenues*, named after the states of the Union. The smaller streets are from 70 ft. to 110 ft. wide, the avenues and streets leading to public places from 120 ft. to 160 ft. wide. The capitol, the noblest structure in the Union, stands on a hill elevated about 75 ft. above the Potomac, which it overlooks. It is built of freestone, and consists of a centre and two wings, the entire front being 350 ft. in length. In the centre of the E. side is a fine portico, supported by 18 Corinthian columns, and approached by a flight of steps: over the centre of the building is a large dome rising to 145 ft. in height: smaller flat domes, reaching to about 70 ft. high, cover the wings. In the interior, under the central dome, is the circular chamber called the Rotunda, ornamented with reliefs, and paintings of national subjects. On the W. of this apartment is the congress library, with 20,000 vols. In the S. wing is the House of Representatives, in the form of a Grecian amphitheatre, 95 ft. in diameter, and 60 ft. in height, surrounded with 24 Corinthian columns of variegated native marble. The seats for the members are conveniently disposed: each member has his fixed place, a chair, and a small desk. The members, when speaking, generally stand in the space between the desk, which affords sufficient room. The senate chamber, in the N. wing, is of the same form, but smaller, being 74 ft. in diameter, and 42 ft. in height. Over the president's chair is a portrait of Washington, and statues of Liberty and History ornament this hall. Underneath is the hall of the supreme court of the U. States; and there are, in the building, 70 rooms for the accommodation of committees. The capitol is surrounded by ornamental grounds, comprising about 22 acres. This magnificent building is said to have cost, in all, the sum of 2,596,500 dolls. Opposite the N. front of the building is a column, erected in honour of the officers who fell at Tripoli. The president's house, of freestone, two stories high, with an Ionic portico, is a handsome building. Beside it are four large edifices for the chief departments of government. In the city are the U. States general post-office, with the patent-office, the arsenal, and navy-yard, a city hall, 250 ft. in length by 50 ft. in breadth, hospital, penitentiary, upwards of 20 churches, 4 market-houses, the Columbian institute, a Rom. Cath. seminary, a city library; with medical, botanical, masonic, and many benevolent societies and other institutions. Washington has a large glass manufactory, but its trade is mostly confined to the supply of goods to the government establishments and members of congress; Alexandria, lower down the river, being more conveniently situated for carrying on foreign trade, of which it has a considerable share.

Mount Vernon, the seat of Washington, the founder and father of the republic, on a bank above the Potomac, is situated about 15 m. from the capital. It continues much in the state in which it was left by its illustrious owner. The remains of Washington, who died on the 11th of December, 1800, are deposited in a vault in the grounds. Washington was made the seat of the United States government in 1800; it sustained a good deal of injury from the British in 1814,

more, perhaps, to the discredit of the latter, than to the loss of the Americans; but not a trace is now visible of these injuries.

WATERFORD, a marit. co. of Ireland, prov. Munster, having S. St. George's Channel; E. Waterford Harbour, by which it is separated from Wexford and Kilkenny; N. Tipperary; and W. Cork. Area, 455,773 acres, of which 118,034 are unimproved mountain, with little bog. Though generally coarse, there is a considerable extent of fine land in this co., particularly in its SE. quarter, and the mountains afford good pasturage. Estates, for the most part, very large; the largest, which belongs to the Duke of Devonshire, is managed on the most liberal principles, and greatly improved. Here indeed, and generally throughout Ireland, tenants and occupiers on large estates are decidedly better off than those on the smaller class of properties. This is the principal dairy co. of Ireland. When it was visited by Mr. Young, not 1-30th part was under the plough. (*Tour in Ireland*, 4to ed. p. 329.) The proportion in tillage is now, however, much larger. This has principally arisen from the vicious custom of dividing farms. 'In this co.,' says Mr. Wakefield, 'when the eldest daughter of a farmer marries, the father, instead of giving her a portion, divides his farm between himself and his son-in-law; the next daughter gets a half of the remainder, and this division and subdivision is continued as long as there are daughters to be disposed of. The sons are left to shift for themselves the best way they can.' Some of the dairy farmers are in easy circumstances; but the condition of the tillage farmers and cottiers is much the same as in other parts of Munster. Some very material improvements have, however, been introduced since 1820, into this and the contiguous cos. Improved swing-ploughs, made of iron, drawn by two horses driven by the ploughman, are now become very general. Land is kept cleaner; there has been a very great increase in the quantity of lime, used as manure; green crops are more attended to; and the quantity of wheat raised within these few years has been more than doubled; while there has been a decided falling off in the production of oats. There has also been a large increase of the exports of butter and bacon. The minerals, which comprise copper and iron, are but little wrought, and are unimportant, which also is the case with manufactures: a considerable cotton manufacture has, however, been established at Portlaw, and some glass is made in Waterford. Principal rivers, Blackwater, Suir, and Bride. Waterford is divided into 7 baronies and 74 parishes, and returns 5 mems. to the H. of C., being 2 for the co., 2 for the bor. of Waterford, and 1 for Dungarvan. Registered electors for the co. 3,477 in 1865. At the census of 1861, the co. had 18,123 inhab. houses, 20,539 families, and 110,959 inhabitants; while in 1841 Waterford had 28,345 inhab. houses, 33,878 families, and 196,187 inhabs.

WATERFORD, a city, parl. bor., and sea-port of Ireland, prov. Munster, on the estuary of the river Suir, about 10 m. from the sea, and 82 m. SSW. Dublin, with which it is connected by the Great Southern and Western railway. Pop. 23,220 in 1861. The city is situated on the S. or SW. side of the river; but a considerable portion of the par. is situated on its opposite side, the communication between them being maintained by a fine wooden bridge, 832 ft. in length by 40 ft. in width. The quay fronting the river, 1,200 yards in length, is one of the finest in Europe, and is bounded on the land side by a range of well built houses. The other principal streets are the Mall, Beresford Street, and Broad Street; but the city is very ir-

regularly laid out, and in the older parts the streets are mostly narrow and dirty, with mean thatched houses, or rather hovels, occupied by a very poor and wretched population. In the more modern parts, however, the streets are comparatively broad, and the houses well built and substantial. The cathedral of the see of Waterford (now merged in that of Cashel) is a fine modern building, with an ornamental spire: near it is the bishop's palace, also a handsome modern structure. Here are 3 parish churches and 4 Roman Catholic chapels. The Presbyterians, Baptists, Methodists, Independents, and Quakers have also places of worship. Among the public buildings, exclusive of the churches, may be noticed the town hall, chamber of commerce, county and city prisons and court houses, artillery barracks, penitentiary, custom house, St. Reginald's tower, on the quay, and an ancient fortress, now a police barrack.

The educational establishments comprise an endowed classical school, under the patronage of the corporation, which provides a residence and salary for the head master; the college of St. John, a plain but spacious building, provides instruction for candidates for the R. C. ministry, preparatory to their entrance into the college of Maynooth, and there are various other public and private schools. The charitable institutions comprise a Bluecoat school for Protestant boys, founded 1700, and possessing an estate of 1,400 acres; a Bluecoat hospital for Protestant girls, founded in 1740; widows' apartments, erected in 1702, for the maintenance of 10 poor clergymen's widows; the leper hospital, founded by King John, and now used as an infirmary, is capable of accommodating 400 patients; the Holy Ghost hospital, founded in 1240, and now appropriated to the reception of females; the fever hospital, the first of the kind in Ireland, opened in 1799, and capable of receiving 150 patients; the lunatic asylum for the co. and city, a large modern building, has accommodation for 117 patients. The union workhouse, opened in 1841, has accommodation for 1,780 inmates. There is also a lying-in hospital, a charitable loan fund, and several orphan societies.

The manufactures of Waterford are unimportant, comprising only breweries, foundries, and several flour-mills; but it is better situated for trade than any other town of Ireland. The harbour is excellent, vessels of 800 tons burden coming up to the quays. The Suir, which is navigable for barges as far as Clonmel, gives it a considerable command of inland navigation; and it is also the principal entrepôt for the produce brought down by the Barrow, and its important tributary the Nore, as well as for the produce which is to be conveyed inland by these channels; its trade is in consequence great and increasing. Its exports of raw produce, including corn and flour, butter, beef, pork, and bacon, hides and tallow, exceed those from any other Irish port, and amount to above 2,000,000*l.* a year. The opening of a steam communication between Waterford and Bristol, and other towns, has been of peculiar advantage to the first. On the 1st of January, 1864, there belonged to the port 50 sailing vessels under 50 tons, and 94 above 50 tons burthen, besides 40 steamers, of an aggregate burthen of 21,710 tons. The gross amount of customs duty received was 80,233*l.* in 1863. The management of the port is vested in 24 harbour commissioners, nominated partly by the chamber of commerce, and partly by the corporation.

Being the place at which Henry II. landed, in 1172, to take possession of his conquests in Ireland, Waterford was early distinguished by marks of royal favour. It appears, however, that the right

to send 2 representatives to the Irish H. of C. was not conferred by charter, but rested only on prescription, the practice having commenced in 1374. At the Union, Waterford was authorised to send 1 mem. to the Imperial H. of C., and under the Reform Act she sends 2 mems. Registered electors, 1,183 in 1865. The limits of the municipal bor. are much less extensive than those of the parl. bor., inc. only 669 acres. Under the act 3 & 4 Victoria, cap. 108, the city is divided into 5 wards, and is governed by a mayor, 5 other aldermen, and 30 councillors. It has a court of record, which decides pleas to any amount; a civil bill court for debts from 2*l.* to 10*l.*; a court of conscience for debts under 2*l.*; and a mayor's court, for the decision of claims as to wages. Assizes for the co. and city are held here twice a year, and general sessions of the peace 15 times.

WATERLOO, a hamlet of Belgium, prov. Brabant, on the verge of the forest of Soignies, and on the road from Brussels to Charleroi, 9 m. S. by E. the former. This village will be ever memorable in military history for the great battle fought in its vicinity on the 18th of June, 1815, between the allied army under the Duke of Wellington, and the French under Napoleon. There is some discrepancy in the statements on the subject, but each army probably consisted of about 70,000 men. The French began the attack between 11 and 12 o'clock forenoon. The object of Napoleon was to defeat the British, or force them to retreat before the Prussians, who he knew were coming up, could arrive on the field, while that of the Duke of Wellington was to maintain his ground till he could be joined by his allies, when it might be in his power to become the assailant. The attacks of the French were repeated with the greatest fury; but they made no serious impression on the British, by whom they were sustained and repelled with invincible courage and resolution. At length, about $\frac{1}{2}$ past 6 o'clock, the Prussians came into the field, with a strong force of from 15,000 to 20,000 men. The English then became the assailants; and though Napoleon brought forward his guard, which had not previously been engaged, it could not stem the torrent, and, having been forced to give way, the whole army got into inextricable confusion, and the rout became universal. The slaughter was enormous. The British lost, besides officers, about 15,000 men killed and wounded. The French loss is not exactly known; but it was not, perhaps, less, in the battle and pursuit, than 30,000 men. All their cannon and baggage also fell into the hands of the conquerors; and it may, indeed, be said that the French army was entirely destroyed.

WATFORD, a market town and par. of England, co. Herts, hund. Cashio; on the Colne, 10 m. NW. London, on the London and North Western railway. Pop. of town, 4,385, and of par. 7,418 in 1861. Area of par., including besides Watford 4 adjacent hamlets, 10,980 acres. The town, which is well built, consists principally of a main street, about 1 m. in length, on the high road from London to Birmingham. The church, in the centre of the town, is a large edifice, consisting of a nave, 3 aisles, and a chancel: it has, at the W. end, a massive embattled tower, 80 ft. in height, surmounted by a small spire rising about 20 ft. higher. It has some fine monuments, especially two by Nicholas Stone. The living, a valuable vicarage, worth 730*l.* a year, is in the gift of the Earl of Essex. Here also are chapels for Baptists and Wesleyans. The educational establishments comprise a free school, founded in 1704, for 40 boys and 14 girls, with an income of about 180*l.* a year;

another free school, with a small endowment, established in 1641; and a national school, supported by subscription: the funds for the general charities yielded, at the date of last inquiry, an income of nearly 850*l.* a year. Next to agriculture, the chief branches of industry pursued here are the spinning and winding of silk, straw plaiting, and malting. There are some very extensive paper mills on the Colne, in the vicinity; and Watford is a considerable market for corn, sheep, cattle, and hogs. Its trade in these is facilitated by the Grand Junction canal, which passes about 2 m. W. of the town, where it is joined by the Colne, which has been rendered navigable to St. Alban's. The London and North Western railway has a station immediately to the E. of Watford, near which the line passes through a tunnel 1,930 yards in length. A council of magistrates, and a court of requests for the recovery of small debts, are held in the town weekly. Markets on Tuesdays; and fairs 4 times a year for cattle, horses, pedlery, and the hiring of servants.

Adjoining Watford on the W. is Cashiobury Park, the seat of the Earl of Essex, lord of the manor. The house has a good deal of the appearance of a monastery: it has some good pictures, and a valuable collection of books.

WEARMOUTH. See **SUNDERLAND**.

WEDNESBURY, a market town and par. of England, co. Stafford, hund. Offlow, near the source of the Tame, in the great coal and iron district of which Birmingham is the centre, 7 m. NW. Birmingham, and 136 m. NW. London by Great Western railway. Pop. of town, 15,298, and of par. 21,968 in 1861. Area of par., 2,190 acres. The church, which stands on a hill, and is supposed to occupy the site of an ancient castle, repaired within these few years, is a fine structure, with a tower surmounted by a lofty spire. It has an octagonal E. end, and other portions in the perpendicular style, and within are some exquisitely carved prebendal stalls, and a curious movable reading-desk. The living, a vicarage worth 800*l.* a year, is in the gift of the crown. Here are chapels for Independents, Wesleyans, and other dissenters, a Lancastrian school, supported by subscription, a small endowed school for poor children, an almshouse, and some minor charities. The inhabs. are mostly employed in various branches of the hardware manufacture, especially in the production of the numerous articles included under the term saddlers' ironmongery, with nails, hinges, edge tools, and cast-iron works of almost every description. Enamel painting is also extensively carried on, and it has a soap manufactory. A valuable potter's earth is obtained in the vicinity, in which are also several corn mills. A branch of the Birmingham canal approaches within a short distance of the town on the one hand, and the Grand Junction railway on the other. The local authority is vested in a constable chosen at the manorial court, held here annually: a court of requests is opened occasionally, for the recovery of debts under 5*l.* Market-day, Wednesday; fairs, twice a year, for cattle and pedlery.

WEIMAR (GRAND DUCHY OF SAXE-), a state of Central Germany, the most important of the minor Saxon states, consisting of several detached portions of territory, bounded on the N. by the dominions of Prussia, and on the other sides by Bavaria, the kingdom of Saxony, the duchies of Coburg, and Meiningen. Total area, 1,421 sq. m.; pop. 273,252 in 1861. The grand duchy is subdivided into the circles of Weimar, Neustadt, and Eisenach. The greater part of the country belongs to what is called the *Thüringerwald*, or

Thuringian forest, and to the basins of the Elbe and Weser; its principal rivers being the Ilm, Saale, White Elster, and Unstrut. Agriculture is the principal occupation of the inhabs.; the soil, consisting of a clayey loam upon a calcareous basis, is moderately fertile. Owing to the minute subdivision of the land, the occupiers are for the most part poor. They live harder than day labourers, and, despite their industry and economy, are often unable to increase their resources. In the vicinity near Weimar the soil is a rich black mould, producing, notwithstanding its defective culture, very superior crops. The villages in this part of the duchy are thickly placed and populous, but, in consequence of the smallness of the farms, there is a great scarcity of cattle. Of late years, however, the rearing of cattle has been a good deal more attended to; and the stock of sheep has been greatly increased in consequence of the ready and advantageous market for wool afforded in England. Game is extremely plentiful, and the woods comprise about one million Prussian *morgen* of land. Most of the peasants' houses are built of timber.

Coal and salt are both raised, the former in no great quantities, but the production of the latter, at Kriebitzsch, may amount to 1,100,000 lbs. a year. Iron and manganese are the chief metallic products. Manufactures are not very important: woollen cloths, carpets, hosiery, linen stuffs, iron, hardware, and tobacco pipes, are the principal products. There are a good many breweries and distilleries. Manufacturing industry is most active in the circle of Eisenach.

The government is a limited monarchy; and the royal family of Weimar took the lead in Germany after the peace, in introducing a free representative system in their dominions. The constitution of the grand duchy was granted May 5, 1816, but slightly altered by the law of October 15, 1849. According to this charter the legislative power is vested in a house of parliament represented by one chamber. It is composed of 31 members, of whom 10 are chosen by the proprietors of nobiliary estates; 10 by the towns; 10 others by the inhabs. of rural districts; and 1 by the senate of the university of Jena. At the general election, which takes place every seventh year, not only the representatives themselves are chosen, but likewise a substitute for every member, who has to take his place in case of illness, death, or prolonged absence. The ten members for the nobility are elected directly by all proprietors of rittergüter, or noble estates, even ladies being allowed to vote. In the representation of towns and rural districts the mode of election is indirect. The whole body of voters in a town choose a certain number of delegates, in the proportion of one to every 50 houses, and these deputies elect the member for the place. To be a member for a town a property qualification of about 50*l.* per annum is requisite, which rises to 75*l.* in the case of the two cities of Weimar and Eisenach. The election of members for the rural districts takes place in the same manner as that for the towns; but the choice of members is limited, inasmuch as they must belong to the same class as the electors. Neither two brothers, nor father and son, are capable of sitting in the chamber at the same time. The president of the chamber is an earl-marshal, elected by the deputies of the nobility, who is assisted by two vice-presidents, chosen by and from among the representatives of towns and rural districts. The chamber meets every three years, and a standing committee of nine members

thalers, or 11*l.* 8*s.* per day, besides a moderate sum for travelling expenses. The powers of the chamber extend to all the branches of legislation, and its consent is indispensable to the validity of all orders and decrees of the government.

The ministry is in three departments, those of justice, finance, and public instruction. There are courts of primary jurisdiction in the principal towns, and courts of appeal in Weimar and Eisenach, in which, with Weida and Dermbach, are also criminal courts; all having appeal to the supreme court of Jena, which is also the supreme tribunal for the states of Saxe-Coburg, Meiningen, and Reuss. Public education is nowhere in Germany so widely diffused, and so well attended to, as in Saxe-Weimar. The budget is granted by the chamber for a period of three years. That from 1863 to 1865 comprises an annual income of 1,658,668 thalers, or 248,808*l.*, and an annual expenditure of 1,654,558 thalers, or 248,189*l.*, leaving a surplus of 4,110 thalers, or 619*l.*, for the year. The chief items of revenue are, per annum, —Indirect taxes, 445,115 thalers; income-tax, 250,610 thalers; and domains and forests, 428,280 thalers. Under expenditure, the largest sums go for—civil list of the grand-duke, 280,000 thalers; public debt, 230,917 thalers; and army, 203,186 thalers. The public debt amounted to 4,560,000 thalers, or 684,000*l.*, on January 1, 1862.

Saxe-Weimar has to contribute 3,350 troops—3,316 infantry and 34 artillerymen—to the army of the Confederation. The number, however, is seldom kept in full force. Saxe-Weimar holds the 15th place in the Confed., having one vote in the full diet, and with Saxe-Coburg, Meiningen, and Altenburg, one in the committee.

WEIMAR, a city of Central Germany, cap. of the above grand duchy, and the usual residence of the grand duke, on the Ilm, an affluent of the Saale, 104 m. W. by S. Dresden, and 116 m. SE. Hanover, and 136 m. SW. Berlin, on the railway from Berlin to Eisenach. Pop. 18,887 in 1861. The city, which is partially surrounded with walls, though irregularly laid out, has several good streets and handsome houses; and deserves to rank with German towns of the second order. The Ilm, which flows along its E. side, is crossed by 3 bridges; it traverses the centre of the ducal park, the chief promenade of the inhabs.; and has, on or near its W. bank, the ducal palace and mews, the riding-house, *rothe schloss* or red castle, public library, and several other public buildings. The ducal residence is a good building, and is tastefully furnished; but comfort rather than magnificence was the object of the late grand duke, by whom it was built. The town church has a large organ; an altar-piece of the Crucifixion, by Luke Cranach, in which are introduced portraits of his friends Luther and Melancthon, and of himself; and monuments to Herder, and numerous members of the ducal family interred here. In the park is a handsome temple containing some beautiful arabesques, and a portrait by Angelica Kauffman. An avenue from this promenade conducts to the Belvidere, a summer palace of the grand duke, about 2 m. distant.

If Dresden be the Florence, Weimar was once fairly entitled to be called the Athens of Germany; having been the residence of Wieland, Schiller, Goethe, and Herder, invited thither by the late grand duke. Goethe and Schiller are buried in the new cemetery, one on each side their patron. During their superintendence, the theatre at Weimar was among the most celebrated in Germany; and its opera is still very well conducted

high rank, and has 96,000 printed vols., besides MSS. It is open to the public, who are even allowed the use of the books at their own houses. In this library are some fine busts, and some paintings by A. Durer. One of the principal objects of notice in Weimar is the *Landes-Industrie-Comptoir*, a vast printing and publishing establishment, in which a great number of persons are employed in translating such foreign works as are likely to be read in Germany. Weimar is the seat of nearly all the superior educational institutions of the grand duchy. It has a famous academy, several hospitals, an orphan asylum, and central prison. The manufactures of Weimar are considerable: a few linen and woollen cloths, ironwares, paper, and beer are the principal products. The town has some trade in corn and wool. Weimar was the birthplace of Kotzebue.

WELLINGBOROUGH, a market town and par. of England, co. Northampton, hund. Hamfordshoe, on the slope of a hill, 10 m. ENE. Northampton, and 63 m. NW. London by Midland railway. Area of par. 4,490 acres. Pop. of do. 6,382 in 1861. The town, which was a place of some consequence in the time of the Saxons, consists principally of four streets, meeting in a market-place. The houses are built of red sandstone, and the town having been almost wholly destroyed by a tremendous fire in 1738, has now a comparatively modern appearance. The church, a large edifice, with a tower and spire, is, like most churches in this co., of a mixed style. It is, however, richly decorated with carved work; in its E. window is some stained glass, and on each side of the chancel are three stalls like those in cathedral choirs. Here also are places of worship for Baptists, Friends, Wesleyans, and other dissenters. The free school, founded by Edward VI., has an income of 112*l.* a year, and is open to all boys belonging to the parish. The number varies from 12 to 20, who are taught Latin gratis, but who pay 1*l.* 1*s.* a quarter for English, writing, and arithmetic. The governors are the trustees of the town estate; the right of appointing the master and usher is vested in the inhabs. paying taxes. The town estate, yielding an income of 350*l.* a year, partly supports the free school; and the usher's salary, with a charity school for the primary instruction of 50 children, is partly dependent on Fisher's endowment of 137*l.* 10*s.* a year. There are several charities for supplying bread to the poor. The manufacture of boots and shoes was carried on very extensively in this town during the war, and, though fallen off, still continues to be its staple business. The corn market, on Wednesdays, is considerable.

Wellingborough derived its name from the wells or mineral springs around it, which formerly enjoyed such celebrity that, in 1626, Charles I. and his queen resided here in tents for a considerable period that they might drink the waters pure from their source. The co. magistrates hold petty sessions for the division weekly in the town hall. Fairs, Easter and Whit Wednesday, and Oct. 29, for live stock and cheese.

WELLINGTON, a market town and par. of England, co. Salop, head of a div. of Bradford hundred, on the ancient Watling Street, 10 m. E. Shrewsbury, and 151 m. NW. London by North Western railway. Area of par., which, besides the town, includes 6 townships, 7,950 acres. Pop. of do., 12,998 in 1861. The town consists mostly of narrow streets; but, of late years, these have been much improved, and are mostly lined with well built houses. The par. church is a handsome structure of freestone with cast-iron pillars, the window frames being also of iron. Here are

several dissenting places of worship, free and national schools, and some almshouses and several minor charities. Near the town are chalybeate and sulphureous springs, frequented by visitors. Most of the inhabs. of the par. are employed in working coal and iron mines, and limestone quarries; and there are in the par. many smelting furnaces, wrought by machinery, with nail-works and glass-works. Malting and some trade in timber are also carried on. The town is governed by a mayor and 2 constables, appointed annually at a mayorial court, who hold petty sessions weekly, and a court of record for debts under 20*l.* at specified times. Market-day, Thursday. Fairs, four times yearly, for cattle and stock.

WELLINGTON, a market town and parish of England, co. Somerset, hund. Kingsbury West, on the railway from Bath to Exeter, 46 m. SW. the former. Area of parish, 4,830 acres. Pop. of do. 6,006 in 1861. The town is regularly laid out, and has been mostly rebuilt during last century: it principally consists of two spacious thoroughfares, crossing each other at right angles, the main street being about $\frac{1}{2}$ m. in length. The church at the N. entrance is a handsome structure of mixed architecture, 110 ft. in length and 50 ft. in breadth, comprising a nave, chancel, two aisles, and two small chapels. At its W. end is a fine embattled tower, 100 ft. in height, crowned with a turret and pinnacles. Within are several monuments, including a magnificent tomb in honour of Sir John Popham, chief justice of England in the reign of Elizabeth and a great benefactor of the town, and a new altar-piece ranking among the finest in the W. of England. A very elegant chapel-of-ease, of Grecian architecture, has been erected at the S. extremity of the town, and there are chapels for Baptists, Independents, Wesleyans, and Friends, the latter being here a very numerous sect. Several schools are attached to the various meeting-houses, and there are endowed almshouses for both sexes, founded by Sir John Popham, with some minor charities. A new market-house, over which is the town-hall, was erected in the centre of the town in 1832.

Wellington had formerly a flourishing manufacture of woollen goods, but it is now much fallen off. It still, however, produces druggets and serges, and has a small manufacture of earthenware. The corn market on Thursday is large and well attended. Wellington is governed by a bailiff and subordinate officers chosen at the annual manorial court.

This town enjoys the distinction of having successively conferred on Arthur Wellesley (third son of the second Earl of Mornington), the greatest of English generals, the titles of viscount, earl, marquis, and duke. An obelisk, upwards of 120 ft. in height, has also been erected in honour of the illustrious duke, on a lofty hill about 3 m. SE. from the town.

WELLS, a city, and a parl. and mun. bor. of England, co. Somerset, hund. Wells Forum, at the S. foot of the Mendip Hills, 17 m. SW. Bath, and 134 m. W. London by Great Western railway. Pop. of city, 4,648 in 1861. It is situated in the centre of the large par. of St. Cuthbert, which contains numerous hamlets, and has an area of about 14,000 acres. The parl. and mun. bor., which are now co-extensive, do not, however, include the whole par. of St. Cuthbert, but comprise only the old city, the liberty of St. Andrew, and some additional portions. The city consists mostly of four principal streets, named from the four verderies into which it is divided. They are well paved and lighted, and have many good houses. The market-place, an extensive area,

communicating by an ancient gateway with the cathedral-close, has in it the town-hall and a handsome public conduit, by which the city is well supplied with water. The great objects of interest in Wells are its fine ecclesiastical edifices. The cathedral, at the E. extremity of the city, is not only one of the most perfect in its original plan, but is more complete as respects its appendages than any other in the kingdom. It was principally designed in the early part of the reign of Henry III. It is built in the form of a cross, from the intersection of which rises a large quadrangular tower 178 ft. in height. The W. front, 150 ft. in breadth, is flanked by two smaller towers, each 130 ft. in height: the total length of the church, from E. to W., is about 380 ft.; its breadth, 131 ft. The situation of this edifice and the adjoining palace is beautiful; and though no whole side, except the W. front, is visible in any one view, the cathedral is well displayed from several points, particularly the north-west. As at Peterborough, the palace and several other buildings adjoin the cathedral, and add much to its general appearance. The character of a large portion of the building is early English, with portions of the two later styles, which are very beautifully accommodated in their forms to the older parts. The nave and transepts, and part of the towers, are early English; the W. front is remarkably rich in niches and statues, and not less so in shafts and other small ornaments appropriate to the style. The lower parts of the sides of the western towers are similarly enriched, but the whole of the remaining exterior of the building is rather plain than otherwise; the upper parts of all the towers are much later than the lower, and much accommodated to the earlier portions as to lines and forms. The eastern part of the cross and the chapter-house are of decorated character, and remarkably elegant. The cloisters are perpendicular: the nave and transepts, and a north porch out of the nave, present an early English arrangement very remarkable for simplicity and elegance. There are various excellent portions of stone screen-work, chapels, and monuments, and some stained glass, the effect of which is peculiarly good. This cathedral is very rich in details of the best as well as the most singular kinds, and, in point of composition, some of its best parts yield to no edifice in the kingdom. The bishop's palace, though it has been altered, and, in some parts, much modernised, contains some fine portions, an early decorated chapel, and some parts of earlier date. Taken altogether, the palace is one of the most valuable remains in the kingdom. The gates and other buildings in the precincts of the cathedral deserve careful examination.

Wells was first erected into a bishop's see in 905. In the 12th century it was united to the abbey-church at Bath; but the writ of *congé d'élire* for the election of the bishop is still addressed to the dean and chapter of Wells. The chapter consists of a dean and 6 other canons, 4 priest-vicars, and 42 prebendaries. Wolsey and Laud were bishops of this see. St. Cuthbert's church is a handsome perpendicular edifice; but its principal feature is its tower, one of the finest of the kind. The living, a vicarage in the gift of the dean and chapter of Wells, is worth 564*l.* a year. There are also places of worship for Independents, Baptists, and Wesleyans. Here is a collegiate school, under the patronage of the dean and chapter, and a united charity-school, founded in 1654, which affords instruction and clothing, to 34 boys and 20 girls, and has an income of

founded and endowed in the 15th century, for aged men and women, which has now an income of above 350*l.* a year, and 30 inmates. There are numerous other charities, including several well-endowed almshouses. Several manufactures that were formerly carried on in the town have either ceased altogether or have greatly declined, and that of silk has been wholly given up. Much of the property of the city belongs to the ecclesiastical or the city corporations, which cannot grant long leases, and give no encouragement to building. The corn-market, which used to be very considerable, has materially declined, but the market for cheese is still one of the most considerable in the W. of England. The trade of the place is mostly, however, confined to the retail supply of the inhabs.

The earliest charter of Wells dates from the 3rd of John; but the governing charter, previously to the Mun. Reform Act, was granted by Elizabeth. By the last-mentioned statute, the town is governed by a mayor, 3 other aldermen, and 12 councillors. A court of quarter-sessions, the jurisdiction of which is confined to cases of misdemeanour, is held 4 times a year; but it is merely a matter of form, all trials being referred to the co. assize-court, and the court of record has also fallen into disuse. The co. assizes are held alternately here and at Taunton. Wells has returned two mems. to the H. of C. since the reign of Edward I.; the right of voting, down to the Reform Act, having been vested in the mayor, masters, burgesses, and persons admitted to the freedom of the city, which was obtainable by birth, marriage, or apprenticeship. Registered electors, 295 in 1865. It is also a polling-place for the E. division of the co. Markets, Wednesday and Saturday, and every fourth Saturday a large market for corn, cattle and cheese. Fairs, five times a year, mostly for cattle, horses, and pedlery.

WELLS, a sea-port town and par. of England, co. Norfolk, hund. N. Greenhoe, on a small creek, about 1 m. from the sea, 28 m. NW. Norwich, on the Great Eastern railway. Area of par. 2,250 acres. Pop. of do. 3,464 in 1861. The town consists principally of two streets, only partially paved. The par. church, a spacious edifice built mostly of flint, with a lofty embattled tower, has some curious sculpture and paintings. Here are several dissenting chapels: a free school for 60 poor children, supported by a part of Ringar's endowment in 1678 of 120*l.* a year, and other endowed charities to the amount of 66*l.* a year for the general relief of the poor. The town has a neat theatre and a subscription library. The harbour of Wells is indifferent, and apt to be choked up with shifting sands, but it has been considerably improved of late years, through the exertions of the harbour commissioners.

The principal trade consists in the shipment of corn and malt, and in the import of coals and timber. There belonged to the port, on the 1st of Jan., 1864, 76 sailing vessels under 50, and 73 above 50 tons, besides three small steamers, of an aggregate burden of 37 tons. The customs duties amounted to 122*l.* in 1863. Oyster fishing gives employment to a considerable number of persons. Petty sessions for the hund. are held once a fortnight, and courts leet and baron once a year. Fair, Shrove Tuesday. The races formerly held at Wells are now discontinued.

About 3 m. W. from the town is Holkham, the magnificent seat of the Earl of Leicester, and the country in the vicinity affords some of the best specimens of what is called the Norfolk system of farming.

town, and par. of Wales, co. Montgomery, hunds. Pool and Caurse, on a branch of the Ellesmere canal, about $\frac{3}{4}$ m. W. from the Severn, 16 m. W. Shrewsbury, and 107 m. NW. London by Great Western railway. Pop. of parl. bor. 5,004 in 1864. The parl. bor., which was formerly much larger, may now be considered as nearly co-extensive with the par., but the mun. bor. is of much smaller extent. It is principally in a hollow, but partly also on the acclivity of an eminence leading towards Powys park and castle, a little S. from the town, but included within the parl. bor.; it is well lighted with gas, and consists of one long and wide street, intersected by others of smaller dimensions, all well paved, and well supplied with water. The houses, which are of brick, have an unusual degree of regularity for this part of the country, the town being, on the whole, neat, cheerful, and English looking. The church of St. Mary, rebuilt in 1774, is a spacious edifice, in the pointed style, with a lofty square tower; it is situated at the base of an eminence, on which is the churchyard, which in some parts overtops the church, and commands a fine view of the town and adjacent country. The living, a vicarage in the gift of the bishop of St. Asaph, is worth 273*l.* a year net. A new and handsome church on the W. side of the town has been erected on a site given by Lord Powys. Here also are places of worship for Baptists, Independents, Calvinists, and Wesleyans. The co. hall, in the centre of the main street, is a handsome brick building, with a colonnade. The co. hall, on the second floor, is 64 ft. in length by 25 ft. in breadth, and 18 ft. in height. Underneath is a spacious corn market and a court room for the co. assizes. A national school for both sexes, in which 250 children are instructed, was opened in 1821; and it has also a free school with a small endowment, almshouses for eight females, a dispensary, and several charitable bequests for the education of children and the distribution of charity among the poor.

From 1782 to 1834 Welshpool was the chief market in North Wales for the sale of Welsh flannels; but in the latter year the greater part of the trade was transferred to Newtown. The flannel manufacture carried on here is not of much importance. Flannel markets are still held once a fortnight, but the business is mostly conducted by private sales. Malting is carried on to a considerable extent, and there are several rather large tanneries. The Severn is navigable to within a short distance of the town, and by means of the Ellesmere canal it communicates with the Birmingham and Chester canal lines. Under the Mun. Reform Act the town is governed by four aldermen and twelve councillors; it has a commission of the peace, petty sessions for the hund. of Caurse, a court leet, and is, twice a year, the seat of the co. assizes.

Welshpool was formerly joined with Montgomery in the exercise of the elective franchise, but was disfranchised in 1728. Under the Reform Act, however, it has been again re-invested with the franchise, and is united with Llanidloes, Llanfyllin, Machynlleth, Montgomery, and Newtown, in returning one mem. to the H. of C. Reg. electors, in the united bors. 954 in 1865. About 1 m. to the S. is Powys Castle, the magnificent seat of earl Powys. It stands on an elevated site, in the centre of an extensive and finely-wooded park. The principal entrance is a gateway between two massive round towers. It has in front two immense terraces rising one above another, the ascent to the castle being by a vast flight of steps. It is superbly fitted up, and

has many fine pictures and works of art, including several pieces of sculpture from Herculaneum. In the vicinity are the Freiddyn Hills, the loftiest of which an obelisk has been erected in honour of lord Rodney.

WEM, a market town, par., and township of England, co. Salop, hund. Bradford, on the Roden, a tributary of the Severn, 11 m. N. by E. Shrewsbury. Area of par. 13,330 acres. Pop. of do. 3,802 in 1861. The town consists principally of one spacious street, from which several smaller streets branch off. The par. church, a handsome edifice, has a lofty tower and a fine chancel; the living, a valuable rectory, with a curacy, worth 1,767*l.* a year, is in the gift of the Duke of Cleveland. The market house is a neat brick and stone building, and in one of its rooms courts leet are held, at which the two bailiffs governing the town are chosen. The free school, founded in 1651 by sir T. Adams, a native of the town, who became lord mayor of London, and who also founded an Arabic professorship in Cambridge, has a total income of about 340*l.* a year, and two of Carew's exhibitions in Bridgenorth school. There are charities making provisions for the poor, but to no considerable amount. The inhabitants of the town are mostly engaged in tanning and malting.

Horsley supposes that Wem occupies the site of the ancient Rutunium; it formerly had a castle, but of this edifice nothing remains. The manor of Wem having come into possession of the crown by the attainder of Philip, earl of Arundel, in the reign of Elizabeth, it was conferred by James II. on his fitting tool, chancellor Jeffries of bloody memory, who had the estate, and who was also created baron Wem. Wycherley, the dramatist, was born near this town in 1640.

WENDOVER, a market town and par. of England, co. Buckingham, hund. Aylesbury, in the vale of that name, 32 m. NE. London. Area of par. 5,250 acres. Pop. of do. 1,982 in 1861. The town is inconsiderable, and meanly built; but notable for the circumstance of its having enjoyed, from the 21 James I. down to the passing of the Reform Act, by whom it was disfranchised, the privilege of sending two mems. to the H. of C. The right of election was nominally in the housekeepers not receiving alms, but really in the lord of the manor. The famous John Hampden (to whose family the manor belonged) represented Wendover in five successive parliaments. The living, a vicarage worth 300*l.* a year, is in the gift of the crown. Petty sessions are held once a fortnight, and courts leet and baron are also held in the town.

WENLOCK (MUCH or GREAT), a parl. and munc. bor., market town, and par. of England, co. Salop, hund. Wenlock, on a small tributary of the Severn, 11 m. SE. Shrewsbury. Area of par. 8,420 acres. Pop. of do. 2,494 in 1861. The parl. bor. is co-extensive with the large district called 'Wenlock Franchise,' consisting of sixteen parishes, in addition to that of Much Wenlock, the whole having, in 1861, a pop. of 21,590. The limits of the old munc. bor. were formerly identical with those of the parl. bor.; but the modern municipal bor. is of much less extent, comprising only the three pars. of Dawley, Madely, and Broseley, the town of Wenlock itself being altogether excluded. The latter, though an inconsiderable place, and indifferently built, has some handsome residences. It consists chiefly of two streets, the houses being mostly of brick. The church, a spacious edifice in the Norman and early English style, has a tower surmounted by a spire at its W. extremity. The living, a vicarage

worth 180*l.* a year, is in the gift of sir W. W. Wynn. It has also a Wesleyan chapel, a free endowed school for twelve boys, almshouses for four women, and several minor charities. There are extensive limestone quarries in the vicinity, and copper mines, now abandoned, were formerly wrought to a considerable extent. The munic. bor. is divided into three wards, and is governed by six aldermen and twelve councillors. It has a commission of the peace, which is opened twice a year; petty sessions once a fortnight, or oftener, if required, and a court of record also once a fortnight: the last, however, has latterly fallen nearly into disuse.

Wenlock received its first charter from Edward IV., under which it sent, in 1478, one mem. to the H. of C.; but Broseley and Little Wenlock being afterwards added to the bor., it was empowered to return two mems., a privilege it has since continued to enjoy. Previously to the Reform Act, the franchise was vested in the freemen of the bor., such freedom being acquired by birth or election. Reg. electors, 999 in 1865. Wenlock probably owed its origin to the foundation of a famous abbey, of which the ruins still exist, a little S. from the town. This edifice, founded towards the end of the 7th century, was mostly rebuilt, soon after the Conquest, in the Norman and early English styles. The entrance from Wenlock was by a strong gateway, one massive tower of which is still standing. Of the church, which dates from 1080, a large portion of the S. side of the nave, the whole S. wing of the transept, several arches on the N., and the foundations of the choir and Lady Chapel, remain. The ruins sufficiently attest the former magnificence and splendour of the structure, the precincts of which included an area of thirty acres. Its revenues amounted, at the dissolution, to 401*l.* a year.

WEOBLY, a market town and par. of England, co. Hereford, hund. Stretford, 10 m. NW. Hereford. Area of par. 3,160 acres. Pop. of do. 849 in 1861. The town consists principally of one street, having several modern and well-built houses. The church is a spacious edifice, to which are attached two or three ancient burial-chapels. The living, a vicarage worth 286*l.* a year, is in the gift of the Bishop of Hereford. A free grammar-school, founded in 1655, affords instruction to 15 boys. Here is also a national school for both sexes, supported by subscription. No particular branch of industry is carried on in the town, which indeed would not have been worth notice, but for the circumstance of its having sent 2 mems. to the H. of C., from the reign of Edward III. down to the passing of the Reform Act, by which it was disfranchised. It has a market on Thursdays, but this is little more than nominal.

WESEL (Germ. *Niederwesel*), a frontier and strongly fortified town of Rhenish Prussia, reg. Dusseldorf, circ. Rees, of which it is the cap., on the Rhine, where it receives the Lippe, 20 m. SE. Cleves, on the railway from Cologne to Amsterdam. Pop. 17,429 in 1861, exclusive of garrison of 5,050 men. Wesel is of high antiquity, and was formerly one of the Hanse Towns. It has some manufactures of cotton and woollen stuffs, leather, and tobacco, with distilleries: its port is convenient, and packets ply regularly between it and Amsterdam. Its defences have been a good deal strengthened by the erection of Fort Blücher on the opposite or W. bank of the Rhine.

WESER (an. *Visurgis*), a river of NW. Germany its embouchure being in the North Sea, and its basin having that of the Elbe to the E., the Ems to the W., and the Rhine and Mayn to the SW. and S. It is formed by the union of the Fulda

and Werra. The former of these rivers has its source in the Rhongebirge, about lat. 50° 27' N., and long. 10° E.; and traversing the electorate of Hesse-Cassel, it passes the cities of Fulda and Cassel. The Werra rises in the Thuringian Forest, in about the same lat., and long. 11°, and intersects several of the smaller Saxon territories, with parts of Prussian Saxony, Hesse-Cassel, and Hanover. Both have a general northerly direction, and unite at Minden, near the southern extremity of the Hanoverian dom. The combined river, or Weser, flows in a N. course, though with numerous windings, through the territories of Hesse-Cassel, Prussian Westphalia, Brunswick, Lippe-Detmold, Hanover, Bremen, and Oldenburg, falling into the North Sea by a wide estuary, about lat. 53° 30' N., and long. 8° 30' E. Its entire length is estimated at nearly 200 m. Its chief affluents are the Aller and Wumme. The Weser is of considerable commercial importance, Bremen being on its banks. Vessels drawing 7 ft. water navigate it up to that city, and it is navigable for boats nearly to its commencement. Vessels drawing from 13 to 14 ft. water ascend the river to Vegesack, 13 m. below Bremen. Ships of large size stop at Bremerhafen, where a new harbour has been formed. Besides the foregoing towns, Minden, Nienburg, Rinteln, and Hameln are on the Weser, and Hanover, Brunswick, and Oldenburg are on its tributaries.

WEST BROMWICH, a market town and par. of England, co. Stafford, hund. Offlow, on the high road from Birmingham to Liverpool, 5 m. NNW. Birmingham, and 188 m. NW. London, by Great Western railway. Pop. of par. 41,795 in 1861. Area of par. 5,380 acres. This, which was formerly an inconsiderable village, has increased rapidly in size and pop., in consequence of its situation in the centre of one of the principal coal and iron districts of the empire, and of the grand seat of the hardware manufacture. The main street, nearly 2 m. in length, contains some good houses; but the town is, for the most part, very irregularly laid out, and its proximity to coal-pits, gas, and iron works gives it a black and very unprepossessing appearance. The old church of All Saints, on an eminence, in the NE. part of the town, is in a mixed style of architecture, and surmounted by a tower. The living, a perpetual curacy, worth 566*l.* a year, is in the gift of the earl of Dartmouth. Christchurch, a handsome Gothic edifice, erected in 1822, is a curacy worth 330*l.* a year. Besides a very fine Rom. Cath. chapel, there are various places of worship for Protestant Dissenters, and a national and some other schools. The gas works in this town, belonging to the Staffordshire and Birmingham Gas Company, are probably the most extensive of any in existence. They supply Birmingham, Bilston, Wednesbury, and a vast number of other towns and villages within a radius of 16 m. Here are also some extensive crown-glass works, which, with the gas manufacture, and the extensive collieries in the vicinity, furnish the chief occupation of the labouring classes. The Birmingham and Dudley canals, in the immediate vicinity of the town, give it the benefit of very extensive water communications. Market day, Saturday. E. of the town is Sandwell Park, the seat of the earl of Dartmouth. The house is built on the site of a priory of Benedictine monks, founded in the reign of Henry II., of which some trifling remains may still be seen.

WESTBURY, a parl. and munic. bor., market town, and par. of England, co. Wilts., hund. Westbury, at the NW. extremity of Salisbury Plain, 22 m. NW. Salisbury, and 109 m. W. London by Great Western railway. Pop. of parl. bor. 6,495

in 1861. The ancient bor. comprised only some portions of the town, but the modern bor. is co-extensive with the par. and hund. of Westbury, having an area of 11,340 acres. The town, which is insignificant and irregularly built, is scattered over a considerable surface, the principal street running nearly N. and S. The church, an old cruciform structure, has a tower rising from its centre, and some fine monuments. The living, a vicarage, to which are annexed the curacies of Bratton and Dilton, worth 238*l.* a year, is in the gift of the precentor of Salisbury cathedral. Here are several Dissenting chapels, a national school for 40 boys, endowed with 1,000*l.* by a benevolent burgess, who also bequeathed a like sum for the annual clothing of 20 poor women. The town hall, a handsome building, was erected in 1815. Westbury and its vicinity had formerly an extensive woollen manufacture, but this has much fallen off. Some malting is also carried on, and, upon the whole, the trade of the town, such as it is, may be considered in a thriving state. The charter by which Westbury was incorporated is not extant; the corporation, by which it has till lately been governed, consisted of a mayor, recorder, and 13 capital burgesses. Westbury returned 2 mems. to the H. of C. from the 27th of Henry VI. down to the passing of the Reform Act, which deprived it of 1 mem. Previously to the Act now referred to, the franchise was vested in the occupiers of 61 burghage tenements comprised in the old bor. Reg. electors, 305 in 1865. The bor. court, held annually on the 2nd of Nov., is the only court held within and for the bor. The election of the bor. officers appears to be its principal duty.

Westbury, though a place of considerable antiquity, is not connected with any historical event of importance. It has two annual fairs, and a nominal market every Tuesday.

WESTMEATH, an inland co. of Ireland, prov. Leinster, having N. Cavan and Meath, E. the latter, S. King's County, and W. Roscommon (from which it is separated by the Shannon), and Longford. Area, 886,251 acres, of which 55,982 are unimproved bog and mountain, and 16,334 lakes. Surface agreeably diversified with woods, lakes, streams, hills, and bogs. The substratum being limestone, the verdure of the fields is remarkably fine, and the soil generally excellent. Property in moderate-sized estates. Leases commonly granted for 21 years, and a life. Grazing-grounds extensive. Tillage farms much subdivided, and husbandry, in most respects, similar to that of Meath, which see. Principal rivers, Shannon, Inny, and Brosna. Westmeath is divided into 12 baronies and 62 parishes, and returns 3 mems. to the H. of C., viz. 2 for the co., and 1 for the bor. of Athlone. Registered electors for the co. 3,568 in 1865. At the census of 1861, the co. had 16,589 inhab. houses, 17,526 families, and 90,879 inhabitants; while in 1841, Westmeath had 24,002 inhab. houses, 25,693 families, and 141,300 inhabs.

WESTMINSTER. See LONDON.

WESTMORELAND, a marit. co. of the N. of England, having N. Cumberland, Durham, and Yorkshire, S. Lancashire and the extremity of Morecambe Bay, and W. Lancashire. Area, 487,680 acres, of which only 180,000 are said to be arable, meadow, and pasture. It is what its name (West-moor-land) imports, a region of lofty mountains, naked hills, and black barren moors; but the valleys, particularly those of the Eden in the N., and of Kendal in the S., are fertile and well cultivated. The agriculture, state of property, character, and condition of the occupiers of Westmoreland are so similar to those of Cumberland, that the statements as to the latter may be applied,

with very little variation, to the former. Average rent of land the lowest of any in England. Westmoreland abounds in slate of the finest quality; in lead; and, in some few places on its S. and W. borders, there are coal mines. Principal rivers, Eden, Lune, and Kent. The lakes are even more celebrated than those of Cumberland: Windermere, on its W. border, is the most extensive lake in England. The co. is divided into 4 wards and 32 parishes. It returns 4 mems. to the H. of C., viz., 2 for the co. and 2 for the bor. of Kendal and some adjoining districts. Reg. electors for co. 4,237 in 1865. At the census of 1861, the co. had 11,793 inhab. houses, with 60,946 inhabitants, while in 1841, Westmoreland had 10,848 inhab. houses, and 56,454 inhabs.

WESTPHALIA, prov. containing all the N. portion of the Prussian dominions to the W. of the Weser, having N., Hanover; E., the latter, and some of the smaller German States; S., the latter, and the Prussian prov. of the Rhine; and W., Holland. Area, 7,771 sq. m. Pop. 1,617,722 in 1861. Principal towns, Munster, Minden, Paderborn, Arnsberg, and Hamm. It is divided into 3 regencies, and these again into 87 circles. Principal rivers, Ems, Weser, Lippe. Surface in the E., NE., and S., hilly or mountainous; but it is level in the middle of the prov., and in the NW. adjoining Holland. In some places the soil is very fertile, but there are some extensive marshes and heaths. Most part of this, as well as of the adjoining prov. of the Rhine, is divided into small farms, the occupiers of which live together in villages. The rent is paid sometimes in money, but frequently in produce or services, or both. The occupiers are a kind of copyholders, their lands descending from father to son. The Rhine provs. being in possession of the French, when the famous edict of 1811 was published, making copyholders freeholders in the old states of the Prussian monarchy, it did not apply to them. (See PRUSSIA.) Principal products, corn, flax, and potatoes. It is also productive of horses, cattle, sheep, and hogs. The latter furnish the Westphalian hams, so abundant, and so excellent. There is also great plenty of game and honey. There are vast beds of coal, with mines of iron, lead, copper, and rock-salt, with salt springs. Manufactures, principally linen, cottons, hardware, and cutlery, the latter being largely produced at Iserlohn, Dortmund, Hagen, and other places; with paper, spirits, tobacco, and various other articles.

WESTPORT, a sea-port town of Ireland, co. Mayo, prov. Galway, on a small river near the SW. angle of Clew Bay, 42 m. N. by W. Galway, and 135 m. WNW. Dublin. Pop. 3,911 in 1861. This is a modern, neat, and rather nice-looking town. It occupies a narrow valley, and on each side and parallel to the stream by which it is intersected is a street planted with trees: the other trees branch from these on either side, and are for the most part inconveniently steep. The par. church is situated within Lord Sligo's park, immediately adjoining the town, and it has also a large Rom. Cath. chapel, with places of worship for Presbyterians and Methodists, several schools, a barrack, a market house, a linen-hall, and court-house. A manor court, with jurisdiction to the amount of 10*l.* sterling, is held once a month; general sessions in April and October, and petty sessions on Thursdays. It is also a constabulary and coast-guard station. The linen trade was, at no very distant period, carried on extensively in this town and its vicinity. Latterly, however, this branch of industry has greatly declined, and the inhabs. are now principally dependent on the

fishery, and on the export of corn and provisions. The port and corn warehouses are situated a little below the town, on the bay, vessels drawing 13 ft. water coming close to the quays. Clew Bay has at its mouth Clare Island, on the most northerly point of which is a lighthouse: there are many small islands within the bay, which, in many places, affords convenient and secure anchorage. The shipping belonging to the port is inconsiderable.

Croagh Patrick, or the Reek, rising 2,499 ft. above the sea, is situated immediately on the S. side of the bay, 4 or 5 m. SW. from the town. This is not only one of the highest, but also one of the most celebrated, mountains in Ireland, being the spot where St. Patrick is said to have collected the snakes and other venomous reptiles from all parts of the island, and from which he precipitated them headlong into the sea! An altar or cairn is erected on the summit of the mountain in memory of this grand achievement, and it continues to be a frequent place of pilgrimage and devotion. The view from the summit is magnificent. The land in the vicinity of the town is divided into very small portions, and the occupiers are, for the most part, miserably poor. Lord Sligo's park or demesne, to which strangers have access, is very fine; but the rest of his immense estate is but little removed from a state of nature.

WEXFORD, a marit. co. of Ireland, prov. Leinster, having on the S. and E., St. George's Channel; on the N., the co. of Wicklow; and on the W., Carlow, Kilkenny, and Waterford Harbour, by which it is separated from Waterford. Area, 573,200 acres, of which 18,500 are unimproved mountain and bog. Surface, pleasantly diversified; climate mild. Soils either light or stiff clays. Property in pretty considerable estates: farms, of various sizes; but there is less of the extreme subdivision of land in this, than in most other Irish cos. Dairies numerous, but badly managed; some districts have been long noted for their great crops of barley. Average rent of land in general is too high, and the competition for small patches is carried beyond all reasonable bounds. The barony of Forth, occupying the SW. angle of Wexford, differs widely from the rest of the co., and indeed, from every other district of Ireland. It was settled at a distant period by a colony from South Wales; and, till very recently, the Welsh language was spoken by everyone, and is still understood by the older inhabs. The people are industrious, provident, peaceable, and cleanly. The farms are small running from 10 up to 50 or 60 acres, but those from 30 to 40 are most common. The land is clean, and well cultivated; the crops of wheat and beans, both of which are extensively grown, are excellent, and the improved Scotch plough with two horses is in universal use. The farm-houses are substantial, and the cottages clean and comfortable, forming, in this respect, a striking contrast with those in most other parts of the co. Persons of different religious creeds live in this barony harmoniously together. Land here, as in the rest of the co., very high-rented. Wexford has neither minerals nor manufactures of any importance. Principal rivers, Slaney and Barrow. Wexford is divided into 8 baronies, and 142 parishes, and returns 4 mems. to the H. of C., viz. 2 for the co., and 1 each for the bors. of Wexford and New Ross. Registered electors for the co., 6,456 in 1865. At the census of 1861, the co. had 26,011 inhab. houses, 28,899 families, and 143,954 inhabitants; while in 1841 Wexford had 33,507 inhab. houses, 36,594 families, and 202,033 inhabs.

Ireland, prov. Leinster, co. Wexford, of which it is the cap., at the mouth of the estuary of the Slaney, on the W. or inner side of Wexford Haven, 67 m. S. by W. Dublin, with which it is connected by railway. Pop. 12,015 in 1861. The town is built wholly on the S. side of the river, and consists of a row of houses along the quay fronting the harbour, of a street parallel to the latter, and of numerous cross streets; but, excepting the quay, they are mostly narrow, irregular, ill-paved, and dirty. A long and poor suburb, principally occupied by fishermen, extends to a considerable distance S. from the town. The communication with the country on the opposite side of the harbour is maintained by means of a wooden bridge, which, with its embankments, is nearly 1,700 ft. in length, having a drawbridge in the centre, the river being navigable to Enniscorthy. The expense of keeping it up is defrayed by a toll. The public buildings and establishments comprise two Protestant churches, several Rom. Cath. chapels, two Methodist meeting-houses, the county court house, a large and handsome gaol, a fever hospital, dispensary, lunatic asylum, a diocesan school for the see of Ferns, and various other schools; a Rom. Cath. college, supported by private endowment, a priory, a nunnery, a public library, chamber of commerce, assembly rooms, club-house, and barracks. The old walls, by which the town was formerly surrounded, were repaired in 1804, but they have since been allowed to go to ruin, and the suburbs extend considerably beyond them. Malt-ing is carried on to a considerable extent.

Wexford Haven is of great extent, and has a fine appearance; but it is shallow, and owing to a bar at its mouth between the two low, long, sandy peninsulas which form its external boundary, it cannot be entered by vessels drawing more than 9 or 10 ft. water, and even these should, with neap tides, have four hours flood to enter. But notwithstanding these drawbacks, Wexford, from her situation in a fertile county, and on a river navigable to a considerable distance by barges, and other circumstances, has a considerable trade, and is one of the principal secondary ports of Ireland for the exportation of corn, meal, and flour, butter of superior quality, provisions, and cattle. Steamers ply between Liverpool and Wexford. Excellent oysters are found in the bay, and the fishing business is carried on to a considerable extent. There belonged to the port on the 1st of January, 1864, 16 sailing vessels under 50, and 77 above 50 tons, besides 4 steamers, of an aggregate burthen of 646 tons.

Wexford has several charters, the first having been granted by the Earl of Pembroke in 1318. Under the Irish Municipal Reform Act, 3 & 4 Victoria, cap. 108, the corporate body consists of a mayor, bailiffs, free burgesses, and commonalty. The bor. returned two mems. to the Irish H. of C. from 1374 down to the Union; and it has since returned one mem. to the Imperial H. of C. Reg. elec. 304 in 1865. The assizes for the co. are held here, with general sessions in January and at Midsummer, special road-sessions twice a year, and petty sessions and a bor. court for debts not exceeding 2l., once a week. Markets, Wednesdays and Fridays. Fairs six times a year.

In 1649 Wexford was taken by Cromwell, when a considerable number of the inhabs. were put to the sword. During the rebellion of 1798 it was, for a while, the head-quarters of the insurgents, by whom it was evacuated after the battle of Vinegar Hill. The town is possessed of considerable property; but it is let on long leases, at a low rate.

WEYHILL, a village of England, co. Hants hund. Andover, within a short distance of the W

verge of Salisbury Plain, 15 m. NW. Winchester. Pop. of par. 444 in 1861. The village is celebrated for its great annual fair, held for six or seven days from the 9th of Oct. This is the largest fair in the S. of England for sheep, and is also a considerable mart for horses, cheese, and hops. A row of booths, called Farnham-row, is assigned exclusively to the dealers in Farnham hops; but hops from Kent and Sussex are also brought thither in considerable quantities. The horses exposed for sale are principally cart colts, nags, and hunters; the cheese consists mostly of N. Wilts, Somerset, and Gloucester. The booths are formed into regular streets, and exhibit all the features of a large town, every part of which presents a scene of bustle and activity. On old Michaelmas day many farm servants are hired.

WEYMOUTH and MELCOMBE REGIS, two contiguous towns of England, forming together a parl. munic. bor. and sea-port, co. Dorset, hund. Calliford-Tree; on the English Channel, at the mouth of the small river Wye, 3 m. N. from the headland called the Isle of Portland, and 147 m. WSW. London by London and South Western railway. Pop. of bor. 11,383 in 1861. Weymouth and Melcombe lie on opposite sides of the harbour, that is, of the narrow outlet of an arm of the sea, called the Backwater, nearly 2 m. in length, being connected by a handsome stone bridge, erected over this outlet in 1770. The most considerable part of Melcombe consists of ranges of buildings situated on the N. side of the harbour, extending for nearly 1 m. in front of the esplanade, along the sea, which here forms a fine semicircular bay. The houses here, which are large and handsome, are chiefly occupied by visitors, attracted to the town by its advantages for sea-bathing, and other conveniences. But with one or two exceptions, the greater number of the other streets are mostly narrow and dirty, with mean houses. Much of the ground on which Melcombe stands is low, and has been reclaimed at different times from the Backwater. On the N., about 20 acres of this land have been enclosed for the purpose of forming a park, and between this and the sea there is a narrow space, built over with good houses.

Weymouth, on the S. side of the harbour, not being resorted to by visitors, retains, in great measure, its original character of a fishing-town, and is irregularly and ill built. It is chiefly inhabited by the labouring classes; in the outskirts, however, there are some good ranges of houses, and handsome detached dwellings. The parish church of Melcombe, rebuilt in 1817, though a spacious edifice, is not remarkable for its architecture: the chapel of ease in Weymouth, opposite the foot of the bridge, is a tasteful modern building in the Gothic style; the living, a perpetual curacy, is attached to the rectory of Wyke Regis, to which par. Weymouth belongs. There are several dissenting chapels; and in Melcombe are spacious assembly-rooms, a small town-hall, neat theatre, good libraries, baths, and other establishments usual at a watering-place. There is a gaol, but of a very inferior description. Two national schools have been founded, and among other charitable institutions for the education and relief of the poor is a bequest of 75*l.* a year for the apprenticing of poor children. The town is lighted with gas; but the inferior streets are badly paved. Facing the sea is the lodge built for the residence of the royal family, by whom the town was frequently visited during the reign of George III. An equestrian statue of that monarch has also been erected at the N. extremity of the main street. On the Dorchester road, near the town, are barracks, now occupied as private houses.

Freestone from the Isle of Portland, Roman cement, bricks and tiles, are among the principal exports. Shipbuilding, and rope and sail making are carried on to a small extent. On the 1st of Jan., 1864, there belonged to the port 24 sailing vessels under 50, and 42 above 50 tons, besides 11 steamers, of an aggregate burthen of 761 tons. The gross amount of customs' revenue was 9,647 in 1863.

Weymouth was but of little consequence till George III. made it his summer residence. Since then it has continued to increase. It is frequented by numerous visitors during the summer season, and a great number of respectable families have made it their permanent residence. The fine sands along the shore, and the gradually increasing depth and purity of the water, render it highly suitable for a bathing place. A raised terrace or esplanade has been constructed round a great portion of its picturesque bay, which constitutes the fashionable promenade of the inhabitants. Races, and a regatta, take place annually in August.

Harbour and Breakwater.—The harbour, which consists of the inlet between Weymouth and Melcombe, so far as the bridge, is narrow, while the bar at its mouth has only 6 ft. water at low ebb; and as spring tides do not rise here more than 6 or 7 ft., the port is not accessible to large vessels. There is, however, excellent anchorage in Portland Roads, about 1½ m. S. by E. from the town, for ships of any size, in from 5 to 6½ and 8 fathoms water. But as these roads are exposed to the E. and SE. winds, which often (especially the latter) throw in a very heavy sea, they were formerly, notwithstanding their convenient situation, but little resorted to. In consequence, it was determined to obviate this defect by constructing two breakwaters, one projecting NE. from the NE. shoulder of the Isle of Portland, a distance of 1,500 ft.; and one 400 ft. from the latter, stretching NNE. and SSW., 6,000 ft. in length. These stupendous works include, within low-water line an area of 1,374 acres, and form one of the best and most secure harbours in the empire, of easy access not only to merchant ships navigating the Channel, but to men-of-war. The foundation-stone of the work was laid by the late Prince Albert, on the 18th July, 1849. It was first projected by Mr. John Harvey, post-master of Weymouth. (See PORTLAND, ISLE OF.)

Weymouth and Melcombe, though originally distinct bors., were united in the 13th of Elizabeth; and from that period down to the passing of the Reform Act, the aggregate bor. possessed the privilege of returning 4 mems. to the H. of C.; but the above Act reduced the number of mems. to 2: while, at the same time, some additions were made to the boundaries of the old bor. Registered electors, 909 in 1865. Under the Municipal Reform Act, the town is divided into 2 wards; and is governed by a mayor, 5 other aldermen, and 18 councillors. It has a commission of the peace, generally held once a year, with jurisdiction over all but capital offences, and a county court. Markets, Tuesdays and Fridays. Fairs, three times yearly.

WHEELING, a town of the U. States, in Virginia. cap. co. Ohio, on the Ohio, at the head of the steam navigation, 50 m. SW. Pittsburgh. Pop. 14,280 in 1860. The town stands in a narrow plain, at the back of which rises a range of steep hills, and consequently is built chiefly in one street along the river. The hills adjacent abound with coal. Besides the usual co. courts, offices, and buildings, Wheeling has several iron foundries, steam-engine factories, numerous woollen and cotton mills, glass-houses, flour and paper mills, and

manufactures of copperas, white lead, tobacco and leather.

WHITBY, a parl. bor. and sea-port town of England, N. Riding co. York, liberty of Whitby Strand, at the mouth of the Esk, here crossed by a swing iron bridge, 42 m. NNE. York, and 247 m. N. London, by Great Northern railway. Pop. of bor. 12,051 in 1861. The parl. bor. includes the townships of Whitby, Ruswarp, Hawkser-cum-Stainsacre. It is built along both banks of the Esk, the direction of which, from S. to N. determines that of the town; but, as the level ground by the river is of very limited dimensions, the buildings on both sides are carried up its banks, which, on the E. side, are especially precipitous. The houses, partly of stone and partly of brick, in the lower part of the town, are closely packed together, and the streets are for the most part narrow, while those on the banks are inconveniently steep; they are, however, well paved and lighted with gas, and some new streets on the W. side of the town are comparatively handsome. The more opulent inhabitants have residences in the environs, which are beautiful and romantic. The old par. church is situated on the top of a cliff nearly 200 ft. above the sea, on the E. side of the town, the ascent to it being by a flight of 190 stone steps. The living, a curacy in the gift of the Archbishop of York, is worth 206*l.* a year nett. It has also places of worship for Methodists, Quakers, Presbyterians, Independents, Rom. Catholics, and other dissenters. Among the educational and charitable institutions may be mentioned, Lancasterian schools for children of both sexes; two infant schools; a seaman's hospital, for 42 widows and their children; a dispensary, established in 1786; a large workhouse, and several minor charities. The public buildings include the town-hall, erected in 1788; a building with public baths and apartments for the subscription library, and the literary and philosophical society, erected in 1826; a handsome news-room and custom-house. The Union Mill, for supplying the members with flour at a reduced price, on the W. side of the town, is a conspicuous object.

The harbour is formed by two piers; that on the W. side, 640 yards in length, terminates in a circular head, on which a lighthouse, having the lantern elevated 82 ft. above the sea, has been constructed. There is a noble quay, extending from the bridge to the west pier. The opposite pier extends about 215 yards from the cliff on the E. side of the river. The channel between the piers forms the harbour, which, however, labours under the drawback of nearly drying at low water; and in rough weather, when the wind is from the N. or NE., a heavy sea is thrown in. To obviate the latter inconvenience, an internal pier has been built, and the inner harbour, or that above the drawbridge, is but little affected by the weather. There are dry docks and slips for the construction and repair of ships, the building of which, though less now than formerly, is carried on to a considerable extent. The manufacture of sail-cloth and cordage is also carried on.

Whitby is principally indebted for its rise to the alum works in its vicinity, commenced in 1595: the exports of the alum, and the import of the coal required in its manufacture, giving birth to a considerable trade. This, however, is by means so extensive as formerly. On the 1st of Jan. 1864, there belonged to the port 61 sailing vessels under 50, and 353 above 50 tons, besides 11 steamers, of the aggregate burthen of 144 tons. The gross customs revenue amounted to 5,580*l.* in 1863. The principal trade, relating to the port is principally

trades. Most part of the large ships sail from London, Bristol, Liverpool, and Hull.

The town is under the superintendence of the magistrates of the N. riding; and a county court is established in it. The Reform Act conferred on Whitby, for the first time, the privilege of sending 1 mem. to the H. of C. Registered electors, 691 in 1865.

Whitby abbey, which, having been destroyed by the Danes, was rebuilt after the Conquest, appears to have been a magnificent edifice. The ruins, in a commanding situation on the cliff near the church, are of considerable extent, and exhibit different styles of architecture. The neighbourhood of Whitby abounds with natural curiosities. In the alum rocks are found an immense variety of petrified shells, trunks of trees, pieces of wood, and bones of fishes, and several highly interesting specimens of the large marine animals called *ichthyosaurus* and *plesiosaurus*—from which were made the models in the Crystal Palace gardens, at Sydenham. There have also been found fossil crocodiles, of which the finest hitherto discovered adorns the Whitby museum, which is particularly rich in specimens of the various organic remains found in the vicinity.

The country about Whitby is highly picturesque, and the beautiful valley of the Esk is also rich in ironstone of superior quality, with an admixture of lime. This has become of late an article of export to the iron works on the Tyne to the extent of from 20,000 to 30,000 tons a year. Freestone of several varieties, for building and engineering purposes, is also extensively exported to the London and other markets on the E. coast, as is also the whinstone (found in the same vicinity) for the repairing of roads when broken, and paving of streets, when shaped into blocks, for which purposes it is considered superior to granite. It is only since the formation of a railway from Whitby to Pickering, opened in 1836, that these mineral stores have been developed and made available. This railway passes for 24 m. through a succession of varied and highly picturesque scenery, affording perhaps the most beautiful ride of the kind in the kingdom. Since the opening of the railway, the fishery at Whitby has very materially increased. There are several mineral springs in the neighbourhood. Market day, Saturday. Fairs, August 25, and Martlemas-day.

WHITCHURCH, a market town and par. of England, co. Hants, hund. Evingar, in div. Kingsclere, on the road from London to Salisbury, 12 m. N. Winchester, and 59 m. SW. London by London and South Western railway. Pop. of par. 1,962 in 1861. The town is quite insignificant; but noteworthy for the fact of its having sent two mems. to the H. of C., from the 27th year of Elizabeth down to the passing of the Reform Act, by which it was disfranchised.

A little to the E. of the church, near the London road, are the paper mills, at which the paper for the notes of the Bank of England has been manufactured since the reign of George I. down to the present time.

WHITCHURCH or **BLANCMINSTER**, a market town and par. of England, co. Salop, hund. N. Bradford, on the borders of Wales and Cheshire, 18 m. N. by W. Shrewsbury. Area of par. 15,380 acres. Pop. of do. 6,093 in 1861. The town is built on an acclivity, the summit of which is crowned by the church, a freestone edifice, erected in 1722 in the Tuscan order, with an embattled square tower 108 ft. in height. The interior is handsome, and it has a good altar-piece, and two recumbent stone figures brought from the ruins of

earl of Shrewsbury, celebrated for his exploits in the wars with France under Henry V., and immortalised by Shakspeare in the first part of Henry VI. The living, a rectory, united with the rectory of Marbury, in Cheshire, is in the gift of the Countess of Bridgewater, and is one of the most valuable in the co., being worth 1,458*l.* a year net. Here also are chapels for Unitarians, Baptists, Independents, and Wesleyans, and public schools and charities having an aggregate income of above 900*l.* a year. The grammar school, which has an income of above 450*l.* a year, instructs a certain number of boys, free of expense, in classics and mathematics, writing and accounts being paid for separately. Courts leet and baron are held in the town hall by a high steward appointed by the lord of the manor. The inhabs. of Whitchurch are principally engaged in the malt and hop trade, in the manufacture of shoes, and lime and brick making. The Ellesmere canal comes up to the town. Markets on Fridays; fairs, four times a year, for farming stock, linen, and hempen and some woollen cloths.

WHITEHAVEN, a parl. bor. and sea-port town of England, co. Cumberland, about 8 m. NE. from St. Bees head, 35 m. SW. Carlisle, and 303 m. NWN. London by the North Western and Lancaster-Furness railways. Pop. of bor. 18,812 in 1861. The parl. bor. includes the village of Preston, to the S. of the town, and a small rural district. The creek, on which the town is situated, is surrounded on the land side by heights which approach close to the buildings. It is regularly laid out; the streets, which are of considerable width, cross each other at right angles, but they are, at the same time, ill-paved and dirty; and though there are many good houses and shops, a considerable proportion of the labouring pop. live in cellars. Among the public buildings are the three churches of St. Nicholas, St. James, and Trinity; the first erected in 1698, the second in 1752, and the third in 1715; the livings, which are perpetual curacies, worth respectively 188*l.*, 200*l.*, and 250*l.*, are in the gift of the earl of Lonsdale, on whose estate the town is built. Here also are chapels or meeting-houses for Methodists, Presbyterians, Anabaptists, Rom. Caths., and other dissenters. The educational establishments comprise a marine school for 60 boys, erected on ground given by lord Lonsdale, and endowed by a citizen of the town; a national and an infant school. It has, also, a theatre, erected in 1769, a subscription library and news-room, a custom-house, market-house, an infirmary, a dispensary, cold and hot baths. There are dry docks and patent slips for the building of ships, which is carried on to a considerable extent; and there are considerable manufactures of sail-cloth and cordage, copperas, tobacco-pipes, and iron and brass foundries. The harbour, formed by piers, constructed at different periods, dried till recently at low water; but it has been so much improved by the construction of a new pier on its S. side, projecting N., that a portion of it has now 9 ft. water at low ebb, and above 20 ft. at springs. Harbour lighthouses have been erected on the outer and inner pier-heads.

Whitehaven, which, in the beginning of the 17th century, was a miserable fishing village, is wholly indebted for its rise and importance to the working of the coal mines in its vicinity, belonging to the earl of Lonsdale. Some of these mines extend below the sea; and in the largest of them all, the William Pitt, about 500 acres are excavated under the sea, the distance being about 2½ m. from the shaft, 110 fathoms deep, close to the shore, to the remotest part of the working. There is, in this immense pit, a stable under the sea for

45 horses. Another pit, recently sunk, runs some miles under the sea, and is held the deepest in the country. The coal, which is of excellent quality, is principally shipped coastwise for Dublin, the Isle of Man, and the S. of Scotland. Exclusive of its coal, Whitehaven exports considerable quantities of lime, freestone, iron-ore, and carries on a considerable trade with the W. Indies, N. America, and other foreign countries. Gross customs' revenue 64,237*l.* in 1863. The town, however, is not flourishing, a consequence most probably, of the superior facilities enjoyed by Liverpool, both as respects the trade with Ireland, and that with the W. Indies and America. The shipping of the port has fallen off materially during the last dozen years; it had, in 1850, 227 ships, of the burden of 36,578 tons, ex. 5 steamers, while on the 1st of Jan. 1864, there were registered but 184 sailing vessels, of an aggregate tonnage of 26,865, besides 3 steamers.

The government of the town, and the care of the docks and harbour, is vested, under an act of Queen Anne, in 21 trustees, 14 of whom are chosen every 3 years by the inhabs. carrying on trade and paying harbour dues; and 6 are nominated by the lord of the manor (earl of Lonsdale), who, being himself added to the list, completes the number. Courts leet are held annually, and there is a county court. Petty sessions are also held by the co. magistrates. Markets, Tuesdays, Thursdays, and Saturdays. The Reform Act conferred on this town for the first time, the important privilege of sending 1 mem. to the H. of C. Reg. electors, 650 in 1865.

Adjoining the town on the E. side is Whitehaven Castle, a seat of the earl of Lonsdale. The town is in the parish of St. Bees, about 4 m. from the village of that name, in which are two valuable institutions; the one being a college where persons of limited means are prepared for the church, and the other a richly endowed foundation school, affording great advantages to the youth of the neighbourhood. A lighthouse of the first class has been erected on St. Bees head. It exhibits a fixed light elevated 333 ft. above the level of the sea.

WHITHORN, a royal and parl. bor. of Scotland, co. Wigtown, the Burrow Head, the SE. extremity of the co., and one of the principal headlands on the S. Scottish coast, being within the par. Pop. of the bor. 1,623 in 1861. The latter, about 4 m. NNW. from the Burrow Head, and 3 m. NW. from its harbour at Isle of Whithorn, built partly on level ground and partly on a gentle acclivity, consists principally of one long and generally wide and well kept street, intersected in the middle by a rivulet concealed by a bridge the entire width of the street. The houses, which are all of stone, and mostly covered with slate, have been greatly improved of late years, many of those that were old and inferior having been pulled down, and replaced by others of a superior quality. The church, on a rising ground, a little W. from the main street, was built in 1822. It is a substantial and commodious edifice; but is totally devoid of architectural beauty, forming, in this respect, a striking contrast to most of the churches latterly erected in this part of the country. Here, also, is a Free church, and places of worship for the United Presbyterian Synod, and for Rom. Catholics. The only public building is the town-house and gaol, surmounted by a tower and spire without any pretensions to elegance. Except the tanning of leather, which is carried on to some extent, the town has no manufactures. Whithorn was made a royal bor. by James IV., in 1511. It is governed, under the Municipal Reform Act, by a

provost, 2 bailies, and 15 councillors. It unites with Wigtown, Stranraer, and New Galloway, in sending 1 mem. to the H. of C. Reg. electors in the bor., 93 in 1865.

Whithorn, which is of high antiquity, is supposed to be identical with the *Leucophibia* of Ptolemy, and is certainly the *Candida Casa* of the venerable Bede. It was early distinguished in ecclesiastical annals, from the circumstance of a church being founded here late in the 4th or early in the 5th century, by St. Ninian, who is said to have been buried within its walls. At a later period, or in the 12th century, a magnificent priory for monks of the Premonstratensian order was erected here by Fergus, lord of Galloway, of which there still remains a fine Saxon arch, embodied in the wall of the old par. church, and some extensive vaults. The real, or supposed, relics of St. Ninian having been collected in this building, it was regarded with feelings of extraordinary veneration, and was, for a lengthened period, a place of pilgrimage and adoration. Several of the kings and queens of Scotland were among the number of its visitors. On one occasion James IV. made a pilgrimage hither on foot, to secure the good offices of the saint in behalf of his queen, then dangerously ill. The bishopric of Galloway, or Whithorn, was one of the oldest in Scotland; and this was a principal residence of the bishops till the abolition of the see.

The *Isle of Whithorn*, about 2 m. NNE. from the Burrow Head, and 3 m. SE. from the bor., may be regarded as the sea-port of the latter. The Isle, now united to the mainland by a causeway, is of very limited dimensions, not probably exceeding 40 or 50 acres. The village, which is built partly on the mainland, and partly on the Isle, has about 450 inhabs. On the Isle are the ruins of a small church, said, though probably on no good grounds, to be one of the oldest in Scotland. A little ship-building is carried on; and there is some trade in the shipping of corn and other products to Liverpool and Whitehaven, and in the importation of coal, slates, freestone, and timber. In the angle between the W. side of the island and the mainland is the harbour. The only danger in entering is the *screens*, a ledge of rock, overflowed at high water, bounding the harbour on the SW. But there is a broad channel between the extremity of the screens and the Isle.

WICK, a royal and parl. bor., and sea-port town of Scotland, E. coast. of the co. of Caithness, of which it is the cap., on the river Wick, at the bottom of a deep bay, 15 m. S. by W. Duncansby Head. Pop. of parl. bor., which includes Wick, Pulteney Town, and Louisburg, 7,475 in 1861. Wick, properly so called, or the old town, is on the N. side of the river, and is irregularly and meanly built, and dirty; it has to the N. the suburb of Louisburg, and is connected by a bridge with Pulteney Town, on the S. side of the river. The latter, built on rising ground, fenced from lord Duffus by the British Fishery Society, is laid out on a uniform plan, and is one of the handsomest fishing villages that is anywhere to be met with. Both towns are lighted with gas. The par. church at the W. end of the town, with 1,835 sittings, was erected, in 1830, at a cost of 4,781*l*. There are, also, Free churches in Wick and in Pulteney Town; and the United Associate Seceders, Independents, Reformed Presbyterians, and Rom. Caths., have places of worship. Exclusive of the churches, the town-hall, county buildings and prison, and commercial hall, are the principal public edifices.

Wick has been for upwards of half a century the principal seat of the herring fishery of Scotland:

and, besides its own boats, its harbour is frequented, in the fishing season, by great numbers of boats from other parts of Scotland, and from Holland. Its port at the mouth of the Wick being small, inconvenient, and unsafe, a new harbour was commenced, in 1810, by the British Fishery Society, which they completed at a cost of 14,000*l*, of which 8,500*l* were defrayed by government. But the accommodation being still insufficient, a new or outer harbour, of larger dimensions, and having deeper water, was completed, in 1831, at an expense of 40,000*l*. On the 1st of Jan., 1864, there belonged to the port 25 sailing vessels under 50, and 38 above 50 tons. The customs revenue amounted to 896*l*. in 1863. The fishery is subject to great fluctuations; for while, in good years, the produce of herrings amounts to 120,000, and even 150,000 barrels, in some years, not more than from 30,000 to 50,000 barrels are taken. In consequence, the business partakes considerably of the nature of a gambling pursuit, and has not the beneficial influence that might otherwise have been expected.

The building of ships and boats, especially the latter, is carried on to a considerable extent; and the town has, besides, rope-walks, a brewery, and a distillery. The principal, or rather sole occupation of the females in and round the town consists in the spinning of yarn for, and in the making and mending of, herring nets. The trade of the port is limited to the export of herrings, and of corn, wool, cattle, and other farm products, and to the importation of coals, timber, and groceries. It has an intercourse by steam with Leith, Aberdeen, Kirkwall, and Lerwick.

Wick was made a royal bor. by James VI. in 1589. It unites with Kirkwall, Dornoch, Cromarty, and Dingwall, in sending 1 mem. to the H. of C. Registered electors in Wick 853 in 1865. It is governed by a provost, 2 bailies, and 9 councillors. Corp. rev., 161*l*. in 1864.

The country in the vicinity of Wick has been greatly improved within the last half century: even so late as in 1790, there was not a cart in the county, nor potatoes, turnips, nor rye-grass; and such a thing as a rotation of crops had not then been heard of. The land was split into minute portions, and held under a system subversive of all industry and improvement.

WICKLOW, a marit. co. of Ireland, prov. Leinster, having N. the co. of Dublin, E. St. George's Channel, S. Wexford, and W. Carlow and Kildare. Area, 499,894 acres, of which 94,000 are unimproved mountains and bog. This is a very mountainous co. In some places it is well wooded, and extremely picturesque and beautiful. Estates mostly large: the most extensive, valuable, and best cultivated belongs to earl Fitzwilliam. Farms of various sizes; many small. Speaking generally, rents are much too high; the labouring pop. not half employed; and their condition, and that of the small farmers, as bad as possible. But little wheat is raised, and that principally in the E. parts of the co. Wicklow has to boast of considerable mineral treasures; and some gold has been found in stream-works in different parts of the co. These, however, have been wholly abandoned, the produce of metal being insufficient to repay the expenses. From 600 to 900 persons may be employed in the copper mines of Cronebane, Ballymurtagh, and Conorree. The ores are shipped at Wicklow, and are smelted in Wales. Bismuth, manganese, and zinc, have also been met with, but in inconsiderable quantities. Marl is very abundant in parts of the co., and is said to have wonderfully increased the fertility of some districts. Principal rivers, Slaney, Eustia-

and Oveca. Wicklow contains 6 baronies, and 58 pars.; and returns 2 mems. to the H. of C., both being for the co. Registered electors for the latter 3,537 in 1865. At the census of 1861, the co. had 14,418 inhab. houses, 16,009 families, and 86,479 inhabitants, while in 1841, Wicklow had 19,210 inhabited houses, 21,182, families, and 126,143 inhabs.

WICKLOW, a marit. town of Ireland, prov. Leinster, co. Wicklow, of which it is the cap., at the mouth of the Vartry, 28 m. S. by E. Dublin, on the railway to Wexford, and 2½ m. W. by N. Wicklow Head, on which there are 2 light-houses with fixed lights. Pop. 3,395 in 1861. Wicklow is irregularly built, and principally derives its means of support from the concourse of persons on co. business, and for bathing during the summer months. Its public buildings comprise the par. church, a Rom. Catholic chapel, meeting-houses for Methodists and Quakers, the court-house and prison for the co., diocesan school, market-house, co. infirmary and fever hospital. Races are held annually on the Morrough, a flat sandy tract, extending several miles along the shore. The corporation, under a charter of James I. in 1613, consisted of a portreeve, 12 burgesses, and a commonalty, which returned 2 mems. to the Irish H. of C. till the Union, when the bor. was disfranchised. The assizes for the co., general sessions and petty sessions, and a weekly court for the adjudication of small debts, are held here. The town is a constabulary and coast-guard station. Markets on Saturdays; fair, March 28, May 24, Aug. 12, and Nov. 25. The harbour is fit only for small craft, having a bar at its entrance which has only 9 feet at high water springs, and 6 feet at neaps. It has, however, some trade in the shipping of copper, ore, and corn.

WIDIN, or VIDIN, a fortified town of Bulgaria, cap. Sanjack, on the Danube, 130 m. SE. Belgrade. Pop. estimated at 26,000 in 1863. Widin presents an imposing appearance from a distance, having numerous mosques and minarets; and its streets, though equally dirty, are broader than in most other Turkish towns. It is the residence of a pacha of 3 tails, and a Greek archbishop; its trade is principally in rock salt, corn, wine, and other products of the surrounding territory. Its fortifications are in a good state of repair, and it is one of the strongest towns in Turkey.

The revenue of Bulgaria is raised in the worst possible manner, consisting principally of a tithe charged on raw produce, and sold to the highest bidder. In the pachalic of Widin the tithe on the fish taken in the Danube produces about 3,000*l.* a year; and the leech fishery also yields a considerable sum.

WIESBADEN, a town of W. Germany, cap. of the former Duchy of Nassau, on an affluent of the Rhine, 4 m. N. from the latter, and 6 m. NNW. Mentz, with which, and Frankfort on-the-Main, it is connected by railway. Pop. 20,797 in 1861. The interior of Wiesbaden is badly laid out; but in its outskirts are many good streets and terraces. Having been, before the annexation of Nassau to Prussia, the seat of a government, it has some showy public edifices, including a ducal residence, infantry and artillery barracks, mint, Rom. Cath. church, and theatre. But most of its buildings consist of hotels, and lodging houses for the accommodation of visitors; its chief prosperity and consequence being derived from its baths and mineral waters. These, the *Aque Mattiaci* of Pliny, are hot saline springs, containing muriate and sulphate of soda, muriate and carbonate of lime, muriate of magnesia and potassa, with some

silica, oxide of iron, and free carbonic acid. There are fifteen different springs; the principal of which is the *Kochbrunnen*, or 'boiling spring,' though its temperature is not boiling, but only about 158° *Fahr.* The other springs are not so hot, but all have the same general character, and are efficacious in cases of gout, rheumatism, paralysis, and rigidity of the skin. The usual time for drinking the waters, and taking baths, is from the middle of June to the end of August, during which all the usual attractions of a watering place are to be met with. The chief scene of gaiety is the *Kursaal*, a large edifice, with a central Ionic portico, which encloses, with its two wings, three sides of a spacious lawn, and comprises many magnificent apartments, including a noble saloon about 140 ft. in length and 50 in height. A band of music attends here every day during the season. Besides this establishment, Wiesbaden has a public library with 45,000 vols., museums of antiquities, and paintings, a well-managed hospital, with manufactures of chocolate, sealing-wax, and glue. The climate is very hot and oppressive in the height of the summer, and there is a deficiency of good ordinary drinking water; but the neighbourhood is pleasant, and abounds with fine views and vineyards. Numerous Roman antiquities have been discovered in and about the town.

WIGAN, a parl. and mun. bor., market town, and par. of England, co. Lancaster, hund. W. Derby, on the Douglas, in the centre of an extensive coal-field, on the railway between Liverpool and Manchester, 17 m. NE. by E. Liverpool, and 17 m. NW. Manchester. Pop. of bor. 37,658 in 1861. The limits of the old parliamentary and municipal bor. were not affected by the Boundary and Municipal Reform Acts, and are co-extensive with the township of Wigan, which has an area of 2,170 acres. The town, situated on a hill, is spread over a large extent of ground, and though irregular, is well built; its appearance, however, is not prepossessing, as the employments carried on in it, and the abundance of coal, give it a dirty blackened look. Of late years, its manufactures, buildings, and pop. have rapidly increased; several new streets, containing many good houses, have been erected; the approaches have been improved; and the whole town, which has been widely extended, especially towards the E., has every indication of augmenting wealth and prosperity. The par. church is a stately old edifice, in the perpendicular style, with a handsome square tower; its interior is spacious and lofty, and it has several fine ancient monuments. Except on the SW., it is closely surrounded by buildings. The living, one of the most valuable rectories in the county, worth 2,230*l.* a year, is in the gift of the Earl of Bradford. Besides 4 other town churches and 11 places of worship for Protestant Dissenters, there are 2 large and handsome R. Catholic chapels. The town-hall, in a small market-place, nearly in the centre of the town, a large brick edifice, was rebuilt in 1720, and has a colonnade, added in 1828; the moot or sessions-hall was rebuilt in 1829. Here also is a large commercial-hall, for the sale of woollen and cotton goods and hardware, erected in 1816; a small bor. gaol, a subscription library, established in 1787; a dispensary, founded in 1798, with a mechanics' institute. Towards the N. extremity of the town is a pillar erected in 1679, in memory of Sir T. Tildesley, killed in the engagement at Wigan on the 25th of August, 1650, between the royalists under the Earl of Derby, and the parliamentary troops under Colonel Lilburn. The free grammar-school, founded in the reign of James I., has since

received various endowments, and is now in the possession of a considerable income. It is conducted under an act passed in 1812, and affords instruction to numerous scholars in classical learning, mathematics, and the modern languages. Here also is a blue-coat school, established in 1773; a school of industry, established in 1823, for the education of girls for domestic servants and housewives; and numerous Sunday-schools. The income arising from private legacies for the education and apprenticing of children, and general relief of the poor, amounts to between 350*l.* and 450*l.* a year.

The principal branches of industry carried on in the town comprise the carding and spinning of cotton, the weaving of muslins, calicoes, and fustians, by power and hand-looms; the manufacture of coarse linens; and more recently of silks. There are also in the parish bleach-works, brass and pewter, nail and machine, factories, and iron.

So early as 1720, an act of parliament was obtained for making the Douglas navigable from Wigan to the Ribble, at the point where the latter empties itself into the sea. This navigation was subsequently purchased by the Leeds and Liverpool Canal Company, and now forms an important branch of their works, conveying vast quantities of coal from Wigan to Liverpool and the N. of Lancashire. The North Union railway, a branch of the Liverpool and Manchester line, passes through the town to Preston and Lancaster.

Wigan is a bor. by prescription; its earliest extant charter dates from the 3rd of Henry III.; but numerous others have been granted by subsequent sovereigns. It sent 2 mems. to the H. of C. in the 23rd of Edward I.; and made another return 12 years afterwards; but from that epoch till the 16th century, a period of more than 200 years, the privilege remained dormant. At its revival the right of election was vested in the free burgesses by custom, of whom, previously to the Reform Act, there were generally about 100. Registered electors, 863 in 1865. Under the Mun. Reform Act, the bor. is divided into 5 wards, and is governed by 10 aldermen, and 30 councillors. It has a commission of the peace, 2 courts leet annually, petty sessions 3 times a week; and a county court.

Wigan, anciently called Wibiggin, though not mentioned in Domesday-book, is certainly of considerable antiquity. A patent for paving the town, and erecting a bridge over the Douglas, was granted in the 7th Edw. III. During the civil wars it was zealously attached to the royalists. Dr. Ieland, author of a 'View of Deistical Writers,' and of several other publications, was a native of this town, having been born here in 1691.

WIGHT (ISLE OF), the *Vectis* of the Romans, an island off the S. coast of England, opposite to, and included in, the co. of Hants, being separated from it by the road of Spithead on the E., and by the Solent, or W. Channel, on the W. The E. Channel, from below Gosport across to Ryde, is about 3 m. in width; but from Hurst Castle across to the island, the W. Channel is little more than 1 m. in width. The figure of the island is rhomboidal, having its shores parallel to the opposite shores of the mainland. From its E. to its W. angle the distance is about 22 m.; and from the N. to the S., about 13 m. Area, 86,810 acres. Pop. of the island, 55,362 in 1861. This is one of the most beautiful districts in the kingdom, being finely diversified with hills, dales, woods, towns, villages, and gentlemen's seats. A range of chalk hills extends lengthwise across the island, affording excellent pasture for sheep, and some very

commanding views. The cliffs on the S. coast are bold and precipitous, and hollowed into chasms, the resort of vast numbers of sea-fowl. The cliffs, called the Needles, on the W. angle, are lofty, almost perpendicular, and strikingly picturesque. One of the tallest of these cliffs, being undermined by the action of the waves, was overthrown in 1782, and totally submerged. Climate extremely mild, and, perhaps, the most salubrious of any in England. Soil dry, loamy, and mostly very fertile; being well adapted for all sorts of agricultural purposes. The husbandry is similar to that followed on the good soils of the mainland (see HAMPSHIRE); and the island has large quantities of agricultural produce to dispose of after supplying its own inhabs. It is divided into two nearly equal parts by the river Medina. Large quantities of fine sand are shipped from Freshwater Bay, for the glass and china manufactures in different parts of the country; but it has no other minerals of any importance. Since the opening of the London and South Western railway, the Isle of Wight has been a great object of attraction, and is visited by crowds of tourists from the metropolis. Under the Reform Act, the Isle of Wight sends 1 mem. to the H. of C. Registered electors, 2,315 in 1865.

WIGTON, a market town and par. of England, co. Cumberland, on the Wiza, 10, m. WSW. Carlisle, on the railway from Carlisle to Whitehaven. Pop. of town, 4,011, and of par. 6,023 in 1861. Area of par. 11,800 acres. The town, which is commodious and well built, consists principally of a main and transverse street, and has several superior inns and dwelling-houses. The par. church, a handsome building, was erected, instead of an older church, which had become ruinous, in 1788; it has attached to it a spacious Sunday-school, built by voluntary subscription in 1820. The living, a vicarage worth 120*l.* a year, is in the gift of the bishop of Carlisle. The grammar-school, established by subscription in 1714, but afterwards endowed, has now an income of above 70*l.* a year: at the time of the late charity inquiry 35 children were taught on the foundation. An hospital for six widows of Protestant clergymen, founded in 1723, has an income of 58*l.* a year; and there are some minor charities. The Wesleyans, R. Catholics, and Friends, have meeting houses at Wigton, and the Friends have, near the town, a school for 60 boys, founded in 1825. Wigton is a place of some manufacturing activity; checks, gingham, muslins, and fustians, being made in the town and par. Several breweries and tanneries are established here: iron and coal are brought to the town from within a distance of 5 m. Petty sessions are held monthly, and an annual court leet and baron in Sept. Markets, Tuesday and Friday; the former a considerable corn mart. Large fairs for horses, cattle, Yorkshire cloth, and hardware, Feb. 20 and April 5; and one on Dec. 21, for butchers' meat, apples, and honey.

About 1 m. S. Wigton is Old Carlisle, probably a Roman station, of the ruins of which Wigton old church was built. Ewan Clarke, the Cumberland poet, and Sir R. Smirke, were natives of Wigton.

WIGTOWN, a marit. co. of Scotland, occupying the SW. extremity of that kingdom, and forming the W. half of the district known by the name of Galloway, has on the S. and W. the Irish Sea, N. Ayrshire, and E. the Stewartry of Kirkcudbright or E. division of Galloway. It contains 511 sq. m., or 326,736 acres, of which about a third part may be arable. Surface hilly, but the hills do not rise to any considerable height. It is divided into three districts, viz. the *Machars*, ex-

tending from Wigtown and Portwilliam to the Burrow Head; the *Rhynns*, comprising the peninsula formed by Loch Ryan and the Bay of Luce, terminating in the Mull of Galloway on the S., and Corsewall point on the N.; and the *Moors*, or upper district. The soil of the first two districts is, for the most part, a hazely loam, dry, and well adapted for the turnip husbandry; but near the town of Wigtown there is a considerable extent of rich alluvial land. The Moors, which are bleak and barren, comprise more than a third part of the co. Climate mild, but rather moist. Property has, for a long series of years, been gradually accumulating in fewer hands, and is now, for the most part, distributed in large estates, held generally under entail: farms middle-sized, and uniformly let on leases for 19 years. Agriculture in this, as in most other Scotch cos., was formerly in the most barbarous and wretched state imaginable. There was no rotation of crops; the process and implements were alike execrable; the pasture land was overstocked; and the occupiers steeped in poverty. Marl, of which Galloway contained immense quantities, began to be discovered and applied to the land about 1730; and for awhile it caused an astonishing improvement in the corn crops. But their unceasing repetition reduced the soil to its former sterility, and convinced the landlords that marling, which promised so much, and by which so much had been realised, could be of no permanent utility to their estates, unless the tenants were restrained from overcropping. In consequence, principally of this feeling, but partly also of the diffusion of intelligence as to such subjects, it was the usual practice, previously to the American war, to prohibit tenants from taking more than three white crops in succession; and it was also usual to prohibit them from breaking up pasture land until it had been at least six or nine years in grass. This practice, barbarous as it is, was a vast improvement on that by which it had been preceded; and it prevailed generally throughout Galloway and Dumfriesshire till the beginning of the present century; and in some backward parts lingers even to this day. But in all the best parts of the district two white crops are now rarely seen in succession; and every department of husbandry has been signally improved. Generally, however, the co. is more suitable for pasture than for tillage; and it, as well as Kirkcudbright, suffered a good deal from overcropping between 1809 and 1815. Oats and barley principal crops; wheat, however, is now raised in considerable quantities. Potatoes largely cultivated. Turnips have been long introduced; but it is only since 1825 that their culture has become an object of general and profitable attention; it is now rapidly extending, and large quantities of bone-dust are imported as manure for the turnip lands. Farm houses and offices mostly new, substantial, and commodious. Roads new, and for the most part excellent. Breed of cattle polled, and one of the best in the empire. Breed of sheep in the low grounds, various; in the moors, principally the black faced, or Linton variety. Minerals and manufactures, quite unimportant. Principal rivers, Cree, Bladnoch, and Luce. It is divided into 17 pars., and returns 2 mems. to the H. of C., viz. 1 for the co., and 1 for the bors. of Wigtown, Whitehorn, and Stranraer, in this co., with which the inconsiderable bor. of New Galloway in Kirkcudbright, is associated. Reg. electors for the co., 1,087 in 1865. At the census of 1861, the co. had 6,868 inhab. houses, and 42,095 inhabitants; while in 1841, Wigtown had 7,440 inhab. houses, and 39,195 inhabitants.

WIGTOWN, a royal and par. bor. and sea-port

of Scotland, cap. of the above co., on rising ground near the mouth of the Bladnoch in Wigtown Bay, 13 m. NNW. the Burrow Head, and 37 m. WSW. Dumfries, on the railway from Dumfries to Portpatrick. Pop. 2,101 in 1861. Wigtown consists principally of a main street of great width, the centre of which has been enclosed, and is now occupied with a shrubbery. The town-house has a low spire at one end. The church, which is old and mean-looking, is situated in a retired churchyard, in which are some interesting monuments to various individuals put to death during the persecutions under Charles II., for their adherence to the Covenant. Here also is a Free church; and the members of the United Associate Synod and the Relief have meeting-houses. A considerable number of the Irish settlers in the town and parish are Rom. Catholics. Recently a very handsome school-house has been built for the par. school; and another school is supported by subscriptions. The harbour, on the Bladnoch, about $\frac{1}{2}$ m. from the town, nearly dries at low water, and the navigation is difficult. The only trade is in the shipping of corn, cattle, and other farm produce, coastwise for Liverpool and other ports, and in the importation of coal, timber, and freestone. The port owned, on the first of Jan., 1864, 42 sailing vessels under 50, and 11 above 50 tons, besides one steamer of 284 tons. Customs revenue 23*l.* in 1863.

Wigtown was made a royal bor. by James III. It unites with Stranraer, Whitehorn, and New Galloway, in sending 1 mem. to the H. of C. Registered electors, 109 in 1865. Under the Municipal Reform Act, it has a provost, 2 bailies, and 15 councillors. Corporation revenue, 560*l.* in 1863-64, principally arising from the rent of land.

WILMINGTON, a town and port of entry of the U. States, in Delaware, co. Newcastle, between the Brandy-wine and Christiana creeks, immediately above their junction, and 80 m. SW. Philadelphia. Pop. 21,260 in 1860. The town is built on gently rising ground, in a pleasant and healthy situation, is regularly laid out, and its houses are mostly constructed of brick. It has a town-hall, a large almshouse, about 15 churches, 2 market-houses, an arsenal, public library, and many superior schools. It is supplied with water from works on Brandy-wine, on which also is one of the largest collections of flour mills in the U. States. Cotton and woollen goods, paper, gunpowder, and iron wares, are made in Wilmington and its vicinity. The trade, both wholesale and retail, is extensive. The Christiana is navigable up to the town for vessels drawing 14 ft. water: a railroad, 27 m. in length, connects Wilmington with Philadelphia; and others connect it with different parts of Delaware and Maryland.

WILNA, or VILNA, a government of European Russia, comprising a large proportion of the ancient Lithuania and Samogitia; principally between the 54th and 56th degrees of N. lat., and the 21st and 27th of E. long.; having N. Courland, E. Minsk, S. Grodno, and SW. Poland and Prussia. Area, 16,320 sq. m. Pop. 876,116 in 1858. It is a vast plain; there being only, in different parts, a few sand-hills, reaching sometimes to the height of 200 ft., and abounding with fossil shells. Principal rivers, the Wilna, a tributary of the Niemen, and the Niemen, which forms its SW. boundary. Lakes are numerous, particularly in the E. and NE. The soil is partly sandy, and partly marshy; but in many places it consists of a fertile alluvial deposit. The climate, though severe, is not so cold as in some of the adjacent governments: the mean temp. of the year is about 45° Fahr. Agriculture is almost the sole occupation of the inhabs.;

and rather more corn is grown than is required for home consumption. Rye is the grain principally cultivated. Hemp and flax are rarely grown; and hops and pulse are raised in gardens: fruits are neglected. The forests are very extensive, the crown possessing above 400,000 deciatines of forest land; and there is a considerable trade in deals, timber, tar, potash, and other woodland products. Lime trees are very abundant; and to this cause is attributed the excellence of the honey, for which this government is famous.

The breeding of stock is neglected; the horses are, however, strong and active, though of small size. Game is very plentiful: elks, wild boars, bears, and wolves, are numerous; occasionally the urus is met with; and fox, martin, and squirrel skins are articles of trade. Mineral products unimportant. Manufactures have increased a little of late; but they are still quite inconsiderable. The trade, which is almost entirely in the hands of the Jews, is principally in timber and agricultural produce, sent down the Dwina to Riga, or by land into Prussia. Wilna is divided into 11 districts; chief towns Wilna, the cap., and Kovno. It preserves several of its old forms of administration. As respects education it is, though far behind, in advance of many of the governments.

WILNA, a town of the Russian empire, cap. of the above gov., and formerly the cap. of Lithuania, at the confluence of the Wilenka and Wilna, 90 m. N.E. Grodno, on the railway from St. Petersburg to Warsaw. Pop. 51,154 in 1858. The town is surrounded by undulating hills, and enclosed by a wall. Its streets are narrow and crooked, and its houses mostly of timber, though it has several hundred dwellings built of brick or stone. Formerly a royal castle of the Jagellons existed here, but nothing is left of it except its ruins. The cathedral, founded in 1837, has some good paintings, and many chapels, one of which, appropriated to St. Casimir, and built wholly of marble, is very handsome. The body of the saint is preserved here in a silver coffin, made by order of Sigismund III., and weighing, it is said, 30 cwt. The church of St. John is surrounded by the buildings of the university, founded in 1578, and suppressed in 1832. Here are in all about 40 churches, numerous convents, a mosque, and 4 synagogues, a magnificent town-hall, an arsenal, exchange, theatre, 2 hospitals, barracks, and magazines. The governor's palace and some residences of the nobility are fine buildings. Previously to its dissolution, the university of Wilna was in a flourishing state, and possessed an observatory, collections in mineralogy and anatomy, and a library of 52,000 vols. A medico-chirurgical school, to which are attached the botanic garden and some of the university collections, an ecclesiastical seminary, and 2 gymnasias, are the principal public schools: most part of the university establishment has been removed to Kief. Wilna has deaf and dumb and foundling asylums, various other charitable institutions, a few manufactures, and a considerable trade.

It was founded in 1322, and is reported to have had, in the middle of the 16th century, 100,000 inhabs. It has often suffered severely from fire.

WILTON, a parl. and munic. bor., and par. of England, co. Wilts, hund. Branch-and-Dole; on the Willy, a tributary stream of the Avon, 4 m. W. by N. Salisbury, on the London and South Western railway. Pop. of bor. 8,657 in 1861. The old bor. comprised only the greater portion of the town; but the modern bor. includes, besides the whole par. of Wilton, 11 adjacent parishes and parts of 5 others, with an extra-parochial district; it has a total area of about 38,000 acres.

Wilton is a neat country town; the main street is paved and lighted, and is crossed by a smaller street nearly in its centre. A handsome church, in the Italian style, with a separate campanile, or bell-tower, has been erected at the expense of the Right Hon. Sydney Herbert. The living is in the gift of the Earl of Pembroke. It has also chapels for Independents and Wesleyans, an endowed free-school, established early in the 18th century, for the education and apprenticeship of 20 boys; a bequest of 1,000*l.*, the interest of which is annually distributed in marriage portions to 4 young women belonging to the town, and several minor charities.

The hospital of St. John is the only one remaining of the numerous monastic establishments formerly existing here. The hospital itself is an old priory building, consisting of four distinct apartments under one roof, with a garden for the use of the inmates, who consist of 2 brethren and 2 sisters, presided over by a prior nominated by the dean of Salisbury cathedral. The rents reserved for the maintenance of the inmates amount to about 30*l.* a year. Wilton had, for a lengthened period, a flourishing manufacture of woollen goods, especially of carpets, and it was here, indeed, that the first carpet made in England was manufactured. This business, however, gradually declined, and though it has somewhat revived of late years, it is still but inconsiderable.

The earliest existing charter of the bor. dates from the 1st of Henry I., but from a very early period it has been governed by a mayor and an unlimited number of burgesses, including a recorder and five aldermen. This bor. sent two mems. to the H. of C. from the 23d of Edward I. down to the passing of the Reform Act, which deprived it of one of its mems. Previously to the last-mentioned act the franchise was vested 'in the mayor and burgesses, who are to do all corporate acts and receive the sacrament.' In point of fact, however, it was a nomination bor. belonging to the Earl of Pembroke. Registered electors, 264 in 1865.

Wilton is very ancient. It had a famous abbey, originally founded in 773, and greatly improved and enlarged after the Conquest. Wilton House, the magnificent seat of the earls of Pembroke, occupies the site of this abbey. It is built in a fine park, watered by the Willy; its garden front was rebuilt from designs by Inigo Jones, and more recently it was enlarged and considerably altered by Wyatt, especially with a view to the better display of its superb collection of ancient statues and other works of art. Wilton was most probably the birthplace of the dramatic poet Massinger; and archdeacon Coxe, author of 'Travels in Switzerland and the North of Europe,' and of various valuable historical works, was, for a lengthened period, rector of Bemerton, in its immediate vicinity. The town has no market, but four annual fairs, that on the 12th of Sept. being one of the largest sheep fairs in the W. of England.

WILTSHIRE, an inland co. of England, in the S. part of the kingdom, having N. the co. Gloucester, E. Berks and Hants, S. the latter and Dorset, and W. Somerset and Gloucester. Area, 865,092 acres, of which about 800,000 are arable, meadow, and pasture. It is divided by the rivers Kennet and Avon, and the canal by which they are united, into two grand divisions, popularly termed, from their situation, North and South Wiltshire. The latter consists, in great part, of Salisbury Plain, extending from Westbury and Warminster, on the W., across the co. to Hampshire, and from Lavington, on the N., to near the

city of Salisbury on the S. It consists principally of chalky downs, intermixed, however, with some fertile, well watered, and beautiful valleys. Though called a plain, the surface, as in all chalk land, is undulating; the most level part lies round Stonehenge. There is a good deal of rich land in the S. division, between Trowbridge and Pewsey, and between the Willy and the Dorsetshire border, E. to Wilton and Salisbury. Marlborough Downs, which bear in most respects a close resemblance to Salisbury Plain, lie in the N. division of the county, between Marlborough and Swindon; but, with this exception, this division consists principally of rich vale land, considerably exceeding in extent and importance the cultivated grounds of the S. division. There are some large estates, but property is, notwithstanding, a good deal subdivided. Farms of all sizes, and generally let on lease, for 7, 14, and 21 years with unobjectionable conditions as to entry. Farm-houses, in the S. division, were formerly built together for the convenience of water, but the more modern ones are generally detached. Agriculture in Wiltshire is in an advanced state, and reflects great credit on the skill and enterprise of the farmers. The land under the plough is remarkably clean and in good order. It is believed, however, that tillage on the down lands has been too much extended. When once broken up, it is extremely difficult to get them again into good condition as pasture; while, unless corn fetches a high price, they are most productive in the latter. Principal corn crops, wheat and barley; the latter being, however, confined, in a great measure, to the light chalky soils. Turnips, rape or cole seed, and potatoes, largely cultivated. Much of the rich land in the N. division is appropriated to the dairy husbandry and the fattening of cattle. The cheese, which, excepting inferior butter made from the whey, is the only product of the dairies, was formerly sold as Gloucestershire cheese, but is now well known and much valued in London and elsewhere by its own proper name of North Wiltshire cheese. Breed of cattle various: they are partly slaughtered in Bath and Salisbury, but the greater number are sold to the London butchers. In despite, however, of the encroachments made by the plough on the downs, sheep continue to be regarded, in the greater part of the co., as the principal support of the farmer. They afford the chief article of manure used on the land; while the sale of lambs and wool furnishes the principal means of paying the rent. In consequence, as it would seem, of this dependence, and of the high price of wool during the last years, there have been fewer complaints among the Wiltshire farmers than amongst those of most southern counties. The sheep stock, consisting partly of the native horned breed, but in a far greater degree of South Downs, and crosses between the two, is estimated at about 700,000, of which about 585,000 are depastured on the downs, and the rest on the cultivated land; the fleeces of the former are supposed to weigh at an average 2½ lbs., and those of the latter 4 lbs.; producing together about 8,650 packs of wool. The irrigation of water meadows is to be seen in the greatest perfection in S. Wiltshire, and is practised on a large scale. Many hogs are kept, and Wiltshire bacon is highly esteemed.

In the vicinity of some of the towns of S. Wiltshire, a good deal of garden husbandry is carried on. Stonehenge stands, in rude magnificence, in the middle of Salisbury Plain. (See **STONEHENGE**.) The manufactures of Wiltshire are considerable; they consist principally of various descriptions of superfine woollen goods, made

at Bradford, Trowbridge, and Westbury; thick-sets, and other sorts of cotton goods, are also prepared, though in small quantities. Wilton was long celebrated for a carpet manufactory, established by one of the earls of Pembroke; but this, though it has latterly increased, is not nearly so considerable as formerly. Speaking generally, manufactures here, as in other southern counties, are on the decline. Principal rivers, Thames, Upper and Lower Avon, and Kennet. Exclusive of some local jurisdiction, Wilts contains 28 hundreds and 300 parishes. It returns 18 mems. to the H. of C., viz., four for the co., two for the city of Salisbury, two each for the bors. of Chippenham, Cricklade, Devizes, and Marlborough, and one each for Calne, Malmsbury, Westbury, and Wilton. Registered electors for the co. 8,489 in 1865, being 5,146 for the Northern, and 3,343 for the Southern division. At the census of 1861, the co. had 53,059 inhab. houses, and 236,027 inhabs; while in 1841 Wilts had 50,879 inhabited houses, and 258,733 inhabs.

WIMBORNE MINSTER, a market town and par. of England, co. Dorset, hund. Badbury, in a valley between the rivers Stour and Allen, each of which is here crossed by a bridge, 2 m. SSW. Salisbury. Area of par. 11,880 acres; pop. of ditto, 4,807 in 1861. The town is pleasantly situated, but the streets, though clean, are irregular, and the houses have but little uniformity; it is well supplied with water, and has been considerably improved of late years. It is principally remarkable for its magnificent minster or church, which was formerly collegiate. The date of its original foundation is uncertain; but it has been usually referred to the 8th century, when a monastery was established here by a sister of Ina, king of the W. Saxons. Some antiquaries are of opinion that the E. tower, and most part of the church, are posterior to but soon after the Conquest. It is a large cruciform structure, 180 feet in length from E. to W., with two towers, one, a short, massive, Norman tower, rising from the middle of the roof, formerly surmounted by a lofty spire, destroyed by lightning early in the 17th century; the other tower, in the Perpendicular style, at the W. end of the building, has a fine window, which has, however, been closed up. The interior is divided after the manner of a cathedral, and till within the last few years the cathedral service was performed here. In the chancel are sixteen stalls, with canopies of carved oak. It has some monuments of distinguished personages, but time and the hand of violence appear to have destroyed a great many more. This edifice underwent extensive repairs and improvements from 1836 to 1840, at the joint expense of Mr. Banks, the earl of Devon, and the duke of Beaufort. The living is a rectory in the patronage of the earl of Shaftesbury. Here also are chapels for Independents, Wesleyans, and Baptists. The free grammar school, originally founded in 1497, and re-established by queen Elizabeth, has an income of about 100*l.* a year. Another free school, founded by the endowment of a private individual in 1695, has an income of 20*l.* a year, and in 1836 was attended by sixteen pupils. St. Margaret's almshouse, which is of very ancient foundation, has an income of about 120*l.* a year, and the aggregate produce of the funds for charitable and religious uses in the parish amounted, at the period of the late enquiry by the charity commissioners, to nearly 1,000*l.* a year. The trade of Wimborne is limited to that arising from a small manufacture of woollen goods, and stocking-knitting. Petty sessions are held here for the Wimborne division of the hund.,

and an annual court at Michaelmas in a tything of the town, at which two bailiffs are appointed by twelve jurymen; but these have no authority over other parts of the town. Wimborne is supposed, from the various coins and antiquities found there, to have been a Roman station. Market day, Friday; fairs frequently, for cattle and cheese.

WINCANTON, a market town and par. of England, co. Somerset, hund. Norton Ferris, on a declivity beside the small river Cale, here crossed by a stone bridge, 23 m. S. Bath. Area of par. 3,860 acres. Pop. of do. 2,450 in 1861. Wincanton, having been destroyed by fire in 1747, has been since regularly laid out in four principal streets. The church, a spacious edifice, partially rebuilt in 1748, has a square embattled tower. The manufacture of serges, bed-ticking, and dowlas, though much fallen off, is still carried on, and the silk manufacture has been introduced on a small scale. Wincanton is an important mart for the cheese made in the surrounding country. The town, divided into a borough and tything, is under the jurisdiction of separate officers; two constables for the former, and a tything-man for the latter, being chosen annually at the manorial court; besides which last, an annual court leet is held here. Market day, Wednesday; fairs, twice a year.

Wincanton is a place of remote antiquity, and is mentioned in 'Domesday Book.'

WINCHCOMBE, a market town and par. of England, co. Gloucester, hund. Kiftsgate, amidst the Cotswold Hills, 6 m. N.E. Cheltenham. Area of par. 5,700 acres. Pop. of do. 2,937 in 1861. The town consists mostly of three streets: the houses are in general of stone. The church, the erection of which commenced in the reign of Henry VI., is a noble Gothic structure, with a lofty square tower embattled and pinnacled; the nave is separated from the aisle by octagonal pillars and compressed arches, and from the chancel by a screen of carved oak. The free school, founded in the 19th James I., has a yearly income of 49*l.* 4*s.*, but has long declined from the condition of a grammar school; and at the last enquiry it afforded only rudimentary instruction to 31 boys. An endowment of 20*l.* a year supplies clothing to the poor. The inhabs. are principally occupied in the manufacture of silk goods, paper, leather, and cotton stockings. Winchcombe is of great antiquity, and before the time of Canute formed a co. of itself, being then surrounded with walls, and having a famous abbey, founded during the heptarchy, but of which, as of its ancient castle, there are now few or no traces. The town was made a bor. in the time of Edward the Confessor, but its charter has long been obsolete. About 1½ m. distant are the remains of Sudley Castle, now the property of the duke of Buckingham.

WINCHELSEA, a bor., cinque port, and market town of England, co. Sussex, E. div. hund. Staple, on the small river Breed, about 1½ m. from the English Channel, 2 m. S. by W. Rye, on the South Eastern railway. Area of par. 1,120 acres. Pop. of par. 719 in 1861. Old Winchelsea, a town of importance under the Romans, situated on the coast at the mouth of the Rother, was destroyed by the encroachments of the sea, between 1280 and 1287. Before its destruction was completed, the inhabs. removed to New Winchelsea, as it was called, on a slight eminence about 2 m. SW. from the ruined town. The new town, which was surrounded with walls by Edward I., co-

considerable share of the trade with France, especially of that with Bordeaux. But, by a singular fatality, it was ruined by a cause precisely the opposite of that which had destroyed the old bor. Instead of encroaching, the sea began in the 16th century to recede from this part of the coast, leaving, in the end, the town without a harbour, 1½ m. from the sea, and in part surrounded with a salt marsh. Since this change was effected, it has progressively declined, and would most probably have been wholly deserted, but for the circumstance of its having enjoyed, from the 42nd of Edward III., down to the passing of the Reform Act, by which it was disfranchised, the important privilege of sending two mems. to the H. of C. It is now included in the bor. of Rye. Of its three churches, only a portion of that of St. Thomas now remains. It has several old monuments, one of which is said to be hardly exceeded by any in the kingdom for beauty of composition. The living, a rectory in private patronage, is worth 278*l.* a year. The court-house and gaol underneath are of Saxon architecture. About a mile N.E. of the town are the ruins of Winchelsea Castle, built in the reign of Henry VIII.

WINCHESTER, a city, parl. and mun. bor. of England, co. Hants, of which it is the cap., hund. Buddlegate, on the Itchin, 12 m. N. by E. Southampton, and 63 m. SW. London, on the London and South Western railway. Pop. of city, 14,776 in 1861. The town, standing on the declivity of a hill gently rising from the river, is regularly laid out, clean, well paved, and lighted with gas. In its centre is the High Street, a spacious thoroughfare, running from E. to W., with parallel streets on either side, crossed by others of nearly an equal length. Most of the SE. part of the town, but without the limits of the city proper, is occupied by the cathedral and some other ecclesiastical edifices and their precincts. The houses are mostly substantial and well built, many of them being in an antique style, and having a venerable appearance. It was formerly surrounded with walls, but these no longer exist: and of four ancient gates only the W. now remains. Of the public edifices the cathedral is by far the most interesting, partly from its vast size and antiquity, partly from the variety of its architecture, and partly from its ancient importance. It was founded in 1079, by bishop Walkelyn, a relative of William the Conqueror, who constructed the crypts, transepts, and tower; the work was continued under succeeding prelates, and was nearly completed by the famous William of Wykeham, between 1370 and 1400. It is of a cruciform shape, with a low tower rising from the centre; and, though rather heavy, has a grand and imposing appearance. Its extreme length, from E. to W., is 545 ft.; length of the nave from the W. porch to the iron doors at the entrance of the choir, 351 ft.; length of the choir, 136 ft.; breadth of the cathedral, 87 ft., and of the choir, 40 ft.; length of the transept, 186 ft.; height of the central tower, 150 ft. The character of the building was originally pure Norman, and the transepts and centre tower, built by bishop Walkelyn, are admirable specimens of that style. The W. front, in the decorated Gothic, built by William of Wykeham, is singularly beautiful: it has a large and two smaller doorways, and a magnificent window, with two slender lantern turrets. The Norman parts of the building are bold, simple, and well executed; the tower massive and finely ornamented. The groining is varied in different parts of the church, and that of the nave is remarkable for its intricacy.

is very rich. The altar-piece is of late Perpendicular; and over it is a painting, by West, of the 'Resurrection of Lazarus.'

The *coup d'œil*, on entering the cathedral by the W. door, is grand and imposing: the vast size of the building; the loftiness and long line of its vaulted roof; the lancet pointed windows shedding on the different objects a 'dim religious light'; the lines of clustered pillars and branching aisles; the numerous chantries and monuments of eminent men; and the silence that prevails within its walls; conspire to impress the mind with a deep sense of awe and sublimity. In the middle of the presbytery, between the choir and the altar, is a coffin tomb said to enclose the remains of William Rufus, killed while hunting in the New Forest, and buried here in 1100. Several Saxon monarchs are also interred in this cathedral. Among the episcopal monuments, the most interesting are those of William of Wykeham and Waynflote, two of the most illustrious prelates of whom England has to boast. The first, who was bishop of this see from 1366 till his death in 1404, besides completing the cathedral, founded and endowed a college, or school, in the city, the scholars educated in which were afterwards to be sent to finish their university education in New College, in the university of Oxford, of which Wykeham was also the munificent founder. Waynflote, who was bishop of Winchester from 1447 to 1486, founded Magdalen College, Oxford, one of the wealthiest foundations in that university. Here also are monuments in honour of the celebrated bishop Hoadley, and of old Isaac Walton, the prince of anglers.

The bishopric of Winchester has long been one of the most valuable in the kingdom, its net revenue having amounted, at an average of the three years ending with 1831, to 11,151*l.* a year: but, in pursuance of the recommendations of the Commissioners of Ecclesiastical Inquiry, its revenue will be reduced on the decease of the present incumbent, Dr. Sumner, who has held the see since 1827—for nearly 40 years.

The diocese includes 384 parishes, comprising, together with Hants, the greater part of Surrey and the Channel Islands. The cathedral establishment consists of a dean, 12 canons, and 8 minor canons, who enjoy amongst them a gross annual income of about 12,000*l.* a year. Winchester is said to have had at one time no fewer than 90 churches and chapels; but of these many were attached to monasteries and other religious establishments destroyed at the Reformation. There are still, however, as many as 9 churches in the city and suburbs. Of these, the small church of St. Lawrence, scarcely visible for the buildings by which it is surrounded, is supposed to be the mother church of the city, and the bishop takes possession of the diocese by making a solemn entry into it. St. Maurice, the principal parochial church, was pulled down in 1840, and an elegant and commodious structure has been erected on the site of the ancient edifice, which had become inconvenient and ruinous; the expense of its construction was defrayed by subscription. Among the other churches are St. Swithun's, built over a postern gate; and St. Michael's, a handsome modern edifice in the pointed style. The livings, except St. Bartholomew-Hyde, a vicarage, and St. John's, a perpet. curacy, are all rectories, and are in the patronage either of the crown or the bishop of Winchester. But, notwithstanding the number of its established churches, dissent is here prevalent; and the Independents, Baptists, Wesleyans, and Roman Catholics, have all places of worship. The chapel of the latter, a handsome edifice in

the pointed style of architecture, was constructed in 1792.

The college, or school, founded, as already stated, by William of Wykeham, and completed in 1393, stands upon the site of a more ancient scholastic establishment. Its buildings enclose two large quadrangular courts, entered by spacious gateways; and besides apartments for the accommodation of the warden and scholars, it has a noble hall and chapel. The whole structure is richly ornamented with pinnacles, buttresses, and statues. It is principally in the perpendicular style. Over the door of the school, a noble hall, constructed in 1687, at the expense of gentlemen educated in the college, is a fine bronze statue of the founder, by Cibber, the sculptor, father of the hero of the 'Dunciad.' A building contiguous to the college is appropriated to the residence of the boys attending the school, but not on the foundation, where they are placed under the special inspection of the head-master. The building formerly used for this purpose being found to be inconvenient, was pulled down, as well as the house of the head-master, in 1839, and a new and splendid edifice has since been erected in their stead, at an expense of about 25,000*l.*, defrayed by subscription. This magnificent institution is the most ancient of the existing public schools of England, and formed the model for those of Eton and Westminster. The establishment consists of a warden, a schoolmaster and usher, 10 fellows, 3 chaplains, 3 clerks, 16 choristers, and 70 scholars; but there are in general above 200 boys in the school, including those not on the foundation. Boys on the foundation are provided with board and lodging within the walls of the college; the only payments to which they are subject, exclusive of travelling expenses, amounting to about 20*l.* a year. Boys not on the foundation lodge, as already stated, in an adjoining pile of buildings, under the superintendence of the head-master, and subject to college discipline. Scholars are sent, as vacancies occur, from this school to New College, Oxford. (See OXFORD.) Among the distinguished individuals educated in this school may be specified Bishop Lowth, Sir Thomas Brown, Sir Henry Wotton, Otway, the tragedian, Young, author of 'Night Thoughts,' Collins, and the two Wartons.

Among the public buildings in the High Street is St. John's House, an ancient structure, formerly the property of the knights templars, and an hospital. The great room in this building, 62 ft. in length and finely proportioned, was fitted up, in its present elegant style, by Geo. Brydges, Esq., a connection of the Chandos family, and a liberal benefactor of this city, of which he was long a parliamentary representative. It has a fine whole length portrait of Charles II., by Lely. In the rear of the building are neat edifices occupied by six poor widows, who, exclusive of their lodging, receive a weekly allowance of 10*s.* and other advantages. In 1833 an important addition was made to this charity by the erection of a building in the Elizabethan style of architecture, with a spacious quadrangle, intended to serve as an asylum for twelve aged females and six old men. Christ's Hospital, founded in 1586, supports six old men, three boys, and a woman. An almshouse, founded by Bishop Morley, in 1672, supports 10 clergymen's widows. Here also are charity schools for boys and girls, a national school for children of both sexes, and a mechanics' institute.

Among the public buildings may be specified the cross in the High Street, a fine structure of the age of Henry VI. in the later pointed style,

above 40 ft. in height. The guildhall, rebuilt in 1713, has in front a statue of queen Anne. The original Winchester bushel of king Edgar, and other ancient standards of length and capacity, formerly preserved in this building, have been removed to an apartment over the W. gate of the city. A bridewell and house of correction has been erected on the site of a magnificent monastery, in which the remains of the great Alfred are said to have been interred. On the N. side of the city is the co. gaol. The co. hospital, in Parchment Street, is a fine structure, which has recently been considerably enlarged; a new corn exchange was erected in 1838. Beyond the W. gate is an obelisk, erected in 1759, to commemorate a dreadful visitation of the plague to which the city was subjected in 1669. The places of amusement include a theatre and assembly-rooms; races take place in July, about 4 m. from the city. It has also a public library and reading-rooms, and a savings' bank.

Winchester has no manufactures, but a very considerable retail trade, and all the public business for the co. is transacted within its limits. A large extent of the surrounding district belongs to ecclesiastical and other corporate bodies, which, not being empowered to grant long leases, give no encouragement to building. The assize courts for the co. are held, and other public business transacted, in what was once the chapel of the castle, built by the Conqueror. At the E. end of the hall is suspended a large round wooden table, 18 feet in diameter, popularly called 'Arthur's Round Table,' but which is, no doubt, of a much less remote antiquity. It was painted in the time of Henry VIII. The circumstance of its being the cap. of the co. makes Winchester the residence of a great number of gentlemen connected with the law; and being also the residence of a number of clergymen, and of gentlemen attracted to the city by the beauty of the situation.

Winchester was first incorporated in the reign of Henry II. Under the Mun. Reform Act, it is divided into 3 wards, and is governed by a mayor, 5 other aldermen, and 18 councillors. It has a recorder, who holds courts and a commission of the peace, and a county court. Winchester has sent 2 mems. to the H. of C. since the 23d of Edward I. Previously to the Reform Act, the right of election was vested in the members of the corporation, who had power to augment their number. Registered electors 933 in 1865.

This is certainly one of the most ancient of the English towns. Under the Romans, it was a place of considerable importance, and it subsequently became the capital of the W. Saxons. William the Conqueror erected a castle here, under the pretence of protecting the city, which had suffered much from the incursions of the Danes, but really, perhaps, in the view of overawing the inhabitants. From this period, however, London became the capital of the kingdom, and Winchester gradually declined in importance. But its castle was repeatedly occupied by the Norman monarchs; Henry III., hence called Henry of Winchester, was born here in 1207, and various parliaments were held in the city in the 14th and 15th centuries. Here, also, in 1552, Henry VIII. entertained his illustrious guest, the emperor Charles V.; and here the marriage of Mary, daughter of Henry, with Philip II., eldest son of Charles, was solemnised July 25, 1554. In the reign of Charles II. it again became, though for a short period only, a royal residence. Charles, indeed, was so much attached to Winchester, that in 1683, he employed the famous architect, Sir Christopher Wren, to erect a new and magnificent

palace on the site of the old castle. The death of the king put a stop to the progress of the building, before it was finished; and, after various mutations, it is now used as barracks.

About 1 m. S. from the city is the ancient hospital of St. Cross, founded, in 1132, by Henry of Blois, bishop of Winchester, and brother to king Stephen. The present establishment, which approaches nearer to a monastery than any other in England, consists of a master, a chaplain, a steward, and 12 resident brethren. The buildings once composed two courts, but they have been partly pulled down. The chapel, in the interior court, is built in the cathedral form, with a nave and transepts, and a low, massive tower at their intersection, and affords a fine specimen of the transition of the Norman into the early English style of architecture. The entrance gateway has a handsome tower, with a statue of the founder, cardinal Beaufort.

No traces now remain of the monastery previously referred to as containing the remains of the great Alfred, rebuilt in the reign of Henry II., the revenues of which amounted at the dissolution to 865*l.* a year. Neither are there any remains of a university founded in the reign of Alfred, and other similar establishments.

About 4 m. E. by N. from Winchester is Avington, a fine seat belong to the duke of Buckingham.

WINDSOR, a town, parl. and mun. bor., par., and royal residence of England, co. Berks, hund. Ripplesmere on the Thames, 20 m. W. by S. London by road, and 21½ by Great Western railway. Pop. of bor. 9,520 in 1861. Previously to the Reform Act, the parl. bor. was nearly co-extensive with the par.; the modern parl. and mun. bor. comprises about half the par., with the lower ward of the castle, and a small portion of the adjacent par. of Clewer; having an area of about 4,500 acres. The town, partly situated on low ground, along the river, and partly on the declivity of the ridge occupied by the castle, the W. end of which is surrounded by its buildings, consists of six principal and several smaller streets, and is well paved, and lighted with gas. It communicates with Eton, on the opposite bank of the Thames, by a handsome iron bridge of three arches, raised on granite piers. Of late years, many buildings of a superior kind have been erected in the W. part of the town, in that portion of Clewer par. included in the modern parl. bor. The par. church is a handsome new Gothic structure; the living, a vicarage worth 400*l.* a year, is in the gift of the crown. The guildhall, a neat edifice, supported on columns and arches of Portland stone, occupies a conspicuous site in the High Street. On its N. side is a statue of Queen Anne, and on its S. one of Prince George of Denmark; in the interior are numerous portraits of royal and other distinguished persons. The cavalry and infantry barracks, the new royal stables, a neat theatre built in 1815, and several dissenting chapels, are among the other principal buildings. The charity school, founded in 1705, had, at the date of the late enquiry, an income of 167*l.* a year, and was attended by 55 children; it has also a ladies' charity school for girls, national and Sunday schools. George III. established an hospital for invalid soldiers in 1784; a lying-in charity was founded in 1801, and the royal general dispensary in 1818, and there are numerous minor charities, having an aggregate income of about 800*l.* a year.

Windsor was first chartered in 1276 by Edward I., in the 30th of whose reign it began to send mems. to the H. of C., though returns have

been regularly made only since the 25th Henry VI. The right of voting was formerly in householders paying scot and lot, who had resided for 6 months within the bor. Under the Boundary Act, the alterations previously alluded to were made in the limits of the bor. Reg. electors 650 in 1865. Under the Mun. Reform Act, the bor. is divided into 2 wards, and is governed by a mayor, 5 other aldermen, and 18 councillors. It has a commission of the peace and a county court. Windsor has no manufacture of importance; and, being out of any principal line of road, its trade is merely one of retail, being confined to the supply of goods to the inhabs. and visitors. It has numerous inns and lodging-houses, though, considering the resort of company to the town, the former are certainly of a very inferior description to what might have been expected. The ale of Windsor enjoys a considerable reputation, and is sent to London and other places. Markets, Wednesday and Saturday, the latter principally for corn. Fairs, Easter Tuesday, July 5, and October 4, for horses, cattle, sheep, and wool.

WINDSOR CASTLE is the principal country seat of the sovereigns of England, and one of the most magnificent royal residences in Europe. It appears to have been founded by William I. soon after the Conquest, and it has been enlarged or embellished by the greater number of his successors, particularly by Edw. III., George III., and George IV. Under the latter it was, indeed, in great part rebuilt, and throughout renovated by Sir Jeffrey Wyatville, and has been fitted up in the most splendid style. Being placed on the summit of a lofty eminence rising abruptly on the S. side of the river, it commands very extensive views, and is, at the same time, a most conspicuous and interesting object from all the surrounding country. It is of an oblong form, and is divided into an upper, a middle, and a lower ward, the entire area comprised within its outer wall being about 12 acres.

The upper or E. ward consists of a quadrangle, having on the N. the state apartments shown to the public; on the S. the apartments appropriated to the use of visitors; and on the E. the private apartments of the sovereign; on the W. the upper ward communicates, by the Norman and St. George's gateways, with the middle ward, a narrow enclosure round the base of the Round tower, which crowns the summit of an artificial mound in the centre of the Castle. The lower ward, which is considerably smaller than the upper, has on its S. and W. sides the houses of the military knights, and the Salisbury, Garter, and Bell towers; and on the N. St. George's chapel, and Wolsey's tombhouse, behind which are other buildings enclosing several smaller quadrangles: it is entered from the town of Windsor at the SW. corner by Henry VIII.'s gateway. On the N. side of the Castle, outside the state apartments and middle ward, is the North Terrace, originally constructed by Queen Elizabeth, and afterwards enlarged and improved by Charles II. This noble walk, resting partly on precipitous ledges of rock, and partly on masonry, rises about 70 ft. over the meadows at its base, and is at once the finest terrace of its kind in the kingdom, and a distinguishing feature of the Castle. On the E. side of the Castle, opposite Her Majesty's private apartments, are the sunk or royal gardens, comprising about two acres.

The principal and most magnificent entrance to the Castle is on the S., by the gateway of George IV., between the York and Lancaster towers. The York tower, on the right hand, formed part of the ancient edifice; but the Lancaster tower is wholly

new, its foundation having been laid on the 12th of August, 1824. The towers are symmetrical, being about 100 ft. in height, with machicolated battlements. Immediately opposite to this gateway is the principal entrance to the state apartments. The grand staircase, with the guard-room at its top, is, perhaps, among the happiest efforts of Wyatville's genius. The staircase is lighted by an octagonal lantern 100 ft. above the pavement, and has a marble statue of George IV. by Chantrey. In the vestibule is the collection of paintings by West, representing the exploits of Edward III.; and in the guard chamber are the coats of mail worn by John king of France, and David king of Scotland, while prisoners in the Castle, with busts of Marlborough, Wellington, and Nelson, the latter on a pedestal formed of a portion of one of the masts of the Victory.

The decorations of the king's drawing-room are very superb: the ceiling is painted in compartments, representing the restoration of Charles II., the labours of Hercules, and other subjects; and on each side the room are numerous paintings by Rubens, and the arms of several of the English kings. The ceiling of the audience-chamber has an allegorical representation of the church of England; and in the same apartment are West's installation of Knights of the Garter, and several portraits. The ball-room, 96 ft. in length, 32 ft. in width, 31 do. in height, is finished in the gorgeous style of Louis XIV. It is hung in part with Gobelin tapestry, representing the story of Jason and the Golden Fleece, said to have belonged to the unfortunate Marie Antoinette. St. George's Hall, the banqueting room of the knights of the garter, is 200 ft. in length, with an arched ceiling divided into compartments and panels, in which are nearly 700 shields, emblazoned with the arms of the knights down to the present time. At the E. end is the throne, under a rich canopy; and on the S. side of the hall are the portraits of the different sovereigns, from James I. to George IV., by Vandyck, Lely, Kneeller, Lawrence, &c. The Waterloo chamber, 100 ft. in length by 46 in width, has portraits, principally painted by Sir Thomas Lawrence, of most of the sovereigns, warriors, and statesmen who took a prominent part in the contest with France terminated by the battle of Waterloo. The other state apartments do not require any particular notice; they have the inconvenience of all entering from each other, so that to get to the last in the range all the others must be gone through.

The entrance to Her Majesty's private apartments is at the SE. corner of the upper ward, through a handsome hall, from which a double staircase leads to a magnificent corridor 500 ft. in length. The private apartments consist of a dining-room, 50 ft. in length by 37 in width; a drawing-room, 66 ft. in length by 30 in width; a smaller drawing-room, 40 ft. in length by 25 in width; library, 50 ft. in length by 40 in width; with bed-rooms, dressing-rooms, boudoirs, &c. These rooms are, as might be expected, most sumptuously furnished. The apartments for servants occupy the lower and higher stories of the palace.

The round tower was originally built by the celebrated William of Wykeham, the architect employed by Edward III. It stands on an artificial mound, and is approached by a covered flight of 100 steps. From a court in the interior, another flight of steps leads to the battlements, whence, in a clear day, portions may be seen of no fewer than 12 coas. This tower, which has been much modernised, is 32 ft. higher than formerly, and is surmounted by a turret 20 ft. in height,

whence the royal standard is displayed; it is the residence of the governor of the Castle. At the base of the tower is a bronze equestrian statue of Charles II., erected by one of his pages.

The great object of interest in the lower ward is St. George's Chapel. 'This,' says Mr. Rickman (*Gothic Architecture*, p. 124), 'is one of the finest perpendicular buildings in the kingdom; it is regular in its plan, and nearly all in one style. It is a cross church, with the transepts ending in octagonal projections which have two heights of windows. At each end of the aisles are also small octagonal projections sideways; all these are separated by screens, and form monumental chapels. In the E. wall of the chapel is a doorway of early English date; and perhaps other portions of a date prior to the present chapel may remain; but the whole of the chapel is a specimen of the perpendicular style in its advanced, but not latest, period. The roof of the nave is painted with armorial bearings, and the whole highly enriched, so that it now presents one of the best examples of the capability of English architecture for the reception of splendid colouring and gilding.'

The interior is divided by the screen and organ gallery into two parts, the body of the chapel and the choir. The W. end of the former is wholly occupied by an enormous window, fitted with painted glass, which, however, is deficient in brilliancy and richness of colouring. The fittings of the choir are mostly modern. St. George's Chapel was built between 1474 and 1516, chiefly under the direction of Beauchamp, bishop of Salisbury, and Sir Reginald Bray, minister of Henry VII. It has served as the burial place of Henry VI. (removed hither by Rich. III. from Chertsey), Edw. IV. and his queen, Henry VIII. and Jane Seymour, and Charles I. It has a few old monuments, including that of Edw. IV., of hammered steel. Here also is a monument in honour of the late Princess Charlotte; but it is generally admitted to be in bad taste, stiff, and unnatural. Adjoining the chapel on the E. is Wolsey's tomb-house, built by Hen. VII., but which afterwards came into the possession of the Cardinal. James II. fitted it up as a Rom. Cath. chapel. It remained unoccupied from this era down to that of George III., by whom it was repaired, and a vault beneath it fitted up as a mausoleum for the royal family: and in it are now deposited the bodies of Geo. III. and his queen, Geo. IV., Will. IV., the Dukes of York and Kent, the Princess Charlotte, and other scions of the Hanoverian dynasty.

But despite its magnificence, it must be admitted that Windsor Castle is extremely deficient in many things that one should expect to meet with in an ancient and favourite seat of the kings of England. Except the associations connected with the building, and the names of some of its towers and apartments, it has but little to connect it with the nation, or to make it an object of interest. In its interior, every thing has been sacrificed to gratify the taste of Geo. IV. for ostentation and vulgar finery. Not a single apartment has been allowed to continue in its ancient state, to carry the visitor back to the days of the Edwards, the Henrys, Elizabeth, or even the Stuarts. Everything that was venerable for its antiquity, or interesting from its history or associations, has been demolished or changed; so that one might suppose it had been wholly constructed within the last 50 years. Nor is there any thing in the fittings-up and embellishment of the apartments to atone for the destruction or metamorphosis of all that was old and interesting in the building. It has nothing to mark it out as the chosen seat of the constitutional sovereign of the British empire.

Excepting the busts of Marlborough, Wellington, and Nelson, there is hardly, in the state apartments, any memorial of any one of the many great men whose exertions have contributed to increase the power and glory of the British nation. We look in vain for either busts or portraits of Shakspeare, Bacon, Milton, Newton, Locke, Dryden, and Pope. Much as the English nation owes to Watt and Arkwright, Windsor Castle has no monument of either the one or the other. And the same may be said of most of our great parliamentary leaders, and even of the men who brought about the Revolution, and placed the Hanoverian family on the throne. The library is wretchedly deficient in books connected with the history and state of the country and its colonies; and the whole internal arrangements are such that a stranger might fairly suppose the palace to have been fitted up for the residence of some opulent upholsterer. Windsor Castle has, in fact, except in its fine situation, size, and external appearance, but little appropriate to or worthy of its destination.

The Little Park is a fine expanse of lawn, comprising nearly 500 acres, round the E. and N. sides of the Castle. In it is the tree usually supposed to be identical with the Herne's Oak of Shakspeare. Windsor Great Park comprises about 3,800 acres on the S. side of the Castle, being well wooded, and exhibiting a great variety of ground. Here is the long walk, a noble avenue, nearly 8 m. in length, extending in a straight line from the grand entrance to the Castle to the top of a hill, on which a colossal bronze equestrian statue of Geo. III., by Westmacott, has been erected. On the S. side of this hill is Virginia Water, an artificial lake, with a fishing temple in the Chinese style. Windsor forest, the theme of Pope's fine poem, is a tract 56 m. in circ., laid out by William the Conqueror for the purposes of hunting, and kept up by the succeeding sovereigns. Latterly, however, it has been mostly enclosed. Its limits embrace one market town, Wokingham, and numerous villages. Old Windsor, where the Saxon monarchs are said to have had a residence, is on the Thames, about 1 m. SE. Windsor. (For the history of the Castle the reader may refer to Lyson's *Magna Britannia*, i. pp. 415-482.)

WIRKSWORTH, a market town and par. of England, hund. of same name, co. Derby, at the S. extremity of the lead mining district, 12 m. NNW. Derby. Area of par. 14,640 acres. Pop. of do. 7,098 in 1861. The town, in a valley nearly encircled by hills, consists principally of 2 streets formed by the intersection of 2 turnpike roads at right angles. The church of St. Mary, a spacious edifice in a mixed style of architecture, consists of a nave and side aisles, a N. and a S. transept, a chancel, and a square tower supported on 4 massive pillars. The living, a vicarage worth 164*l.* a year, is in the gift of the Dean of Lincoln. There are chapels for Baptists, Independents, and Wesleyans. A free grammar-school, founded and endowed in 1570 by Anthony Gell, Esq., for an unlimited number of scholars, has an income of above 200*l.* a year. There are several almshouses, and the funds for general charities yield an income of above 130*l.* a year. The moot and sessions hall, erected in 1773, is a handsome stone building with shambles underneath. The lead mines in the vicinity, though now comparatively neglected, still furnish employment for a considerable number of the inhabs. The chief branches of industry consist of cotton spinning, silk weaving, wool combing, and the making of hats, tapes, and hosiery. The Cromford canal passes about 1½ m. to the N. of the town, crossing the Derwent by an aqueduct of one arch 80 feet in span; and the

High Peak railway has its terminus a little to the N. of Wirksworth. The town is under the jurisdiction of a constable and headborough. Petty sessions for the hund. are held weekly, and 4 manorial courts every year in the moot hall, in which all business relating to the mines is decided.

The manor of Wirksworth forms a part of the duchy of Lancaster. It was acquired by Sir Richard Arkwright, the great founder of the cotton manufacture, who died at his house at Cromford in this par. in 1792.

WISBEACH, a mun. bor., market town, river-port, and par. of England. co. Cambridge, hund. Wisbeach, in the Isle of Ely, close to the border of Norfolk, on the Nene, 11 m. S. from the mouth of the Nene, in the Wash, and 32 m. N. Cambridge, on the Great Eastern railway. Pop. of bor. 9,276 in 1861. The old bor., of very irregular shape, was co-extensive with the par. of St. Peter's: the modern bor. is much more compact, and of less extent, but comprises a suburb of Wisbeach called New Walsoken, on the E. side of the river, excluded from the old bor., and has an area of about 1,200 acres. The central and main portion of the town lies in an angle between the Nene and Wisbeach canal: other streets extend for some distance N. and S. along both banks of the river, and along the canal, by which the town communicates with the Ouse in a S.E. direction. Most part of the houses on the E. side of the canal belong to the par. of Walsoken, in the co. of Norfolk: this suburb has been built within the last thirty years, and appears to be still extending. The inhabs. consist chiefly of the labouring classes employed in or connected with the interests of Wisbeach. The town is irregularly laid out, but has, of late, been much improved: in its centre is a handsome crescent, erected in 1816 on ground formerly occupied by a castle founded soon after the Conquest. Most parts of the thoroughfares are well paved and lighted with gas. The par. church of St. Peter is a spacious but singular edifice, having two naves and two aisles. It exhibits a mixture of the Norman, Decorated, and Perpendicular styles. It has a fine tower, and has within several monuments of distinguished families, but is at the same time much encumbered with modern galleries. The living, a vicarage, to which the curacy of St. Mary's is attached, is one of the most valuable in this part of the country, being worth 1,779*l.* a year: it is in the gift of the Bishop of Ely. A chapel-of-ease has an endowment yielding 200*l.* a year; and the Baptists, Friends, Unitarians, Independents, and Wesleyans have places of worship. The other principal buildings include a town-hall and custom-house, comprised in one building, erected in 1804; a corn-exchange, assembly-rooms, and a theatre. Here, also, are some good libraries, and literary and other societies. The free grammar-school, of ancient foundation, affords instruction to 20 boys, and has two exhibitions of about 70*l.* a year to Magdalen College, Cambridge. Among the other educational establishments are two charity schools, partly supported by voluntary contributions, but chiefly by bequests; one for boys, having an income of above 250*l.* a year, and one for girls, of above 220*l.* a year. There are 18 well-endowed almshouses, and the funds in the hands of the corporation for the support of schools, almshouses, apprenticing of children, loans, and the general relief of the poor, amount to above 1,130*l.* a year.

Wisbeach has no staple manufacture; but it has an iron foundry, yards for building and repairing vessels and boats, rope-walks, an extensive brewery, and several large malting establish-

ments. The trade of the town is considerable, from its being the emporium of an extensive tract of country. The exports principally consist of corn, wool, rape-seeds, and other products of the fens; and the imports of coal, timber, and groceries. The trade of the port has been largely benefited by the great improvements that have been made, under acts passed in 1827 and 1829, in the course of the Nene from Wisbeach to its outfall in the Wash. These consisted principally in deepening and straightening the bed of the river, and in the drainage and embankment of the adjacent fens. This important work cost about 200,000*l.*, of which 30,000*l.* was contributed by the corporation of Wisbeach, who were at the same time authorised to levy increased port dues (now 3*d.* per ton) on vessels frequenting the port. The latter may now be reached by a comparatively safe and speedy navigation, at spring tides, by vessels of 150 tons burden, and, at other times, by vessels of 80 tons. There belonged to the port on the 1st of Jan., 1864, 12 sailing vessels under 50, and 45 above 50 tons, besides 4 steamers, of an aggregate burden of 746 tons. The gross amount of customs' duty was 8,956*l.* in 1863. The increase in the amount of shipping belonging to the port, which has trebled since 1835, when the Nene Outfall was finished, and of the customs' duties, shows the substantial advantages it has derived from that improvement.

Wisbeach received its first charter of incorporation from Edw. VI., others being granted to it by James I. and Charles II. Under the Mun. Reform Act, it is divided into two wards, and governed by 6 aldermen and 18 councillors. The corp. revenue principally arises from harbour dues. Wisbeach has a commission of the peace, petty sessions and a county court. The assizes are held here annually. The ancient castle of Wisbeach was long the episcopal palace of the bishops of Ely, but no traces of it now exist. A cattle-market was established in 1810. Wisbeach has frequently suffered from inundations. Market-day, Saturday. Fairs, five times yearly, chiefly for cattle, horses, hemp, and flax.

WISBY, a town of the island of Gottland, which see.

WISCONSIN, one of the states of the American Union, comprised between the 42nd and 47th degrees of N. lat., and the 87th and 98rd of W. long.; having N. Lake Superior; NE. and E. the State and Lake of Michigan; S., Illinois; and W., Iowa and Minnesota, from which it is partly separated by the Mississippi. Area 53,924 sq. m., pop. 775,881 in 1860. The surface is in part broken by billowy ridges, which, however, nowhere rise much above the general level. The N. part abounds with lakes, giving rise to streams flowing E. to the great lakes of the St. Laurence Basin, but mostly W. and S. to the Mississippi. The Wisconsin river, which falls into the latter, after a southerly course, divides the state into two nearly equal portions. By far the greater part of this state was till lately inhabited only by wandering tribes of Indians. The country S. of the 44th deg. of lat. is that over which the settlers are principally dispersed. The SW. cos. include a portion of the rich lead district of the Upper Mississippi. In winter the climate, especially in the N. parts of the state, is severe; but speaking generally, the country is very healthy.

There are some bogs, wild rice swamps, and cranberry marshes in the S. cos., and there are also some sandy tracts; but a great proportion of the land is of good quality, fertile, and easy of cultivation. Between Rock River and Lake Michigan the surface is well wooded; but W. of

the former the land is chiefly prairie, and there is a deficiency of timber. Green Bay, an arm of Lake Michigan, and nearly parallel to the latter, has several good harbours. Milwaukie, on Lake Michigan, is the best harbour between Green Bay and Chicago, in Illinois, at the bottom of the lake. In no part of the U. States have pop. and improvement advanced more rapidly than in the S. part of this state.

The governor, lieutenant-governor, secretary of state, treasurer, superintendent of public instruction, attorney-general, bank comptroller, and state prison commissioner are chosen by the people to serve for a term of two years. The general election is held on the first Tuesday in November. Senators, 33 in number, elected for two years, and representatives, 100 in number, elected for one year, constitute the legislature, which is styled the General Assembly of Wisconsin. The members of the legislature are allowed $2\frac{1}{2}$ dollars per day for attendance, and 10 cents per mile of necessary travel. The legislature is required to assemble in regular session annually, on the second Wednesday in January.

The judicial power of the state, both as to matters of law and equity, is vested in a supreme court, circuit courts, courts of probate, and in justices of the peace. The legislature has power to establish municipal courts, with jurisdiction in their respective municipalities, not exceeding that of the circuit courts, and also to create inferior courts in the several counties, with limited civil and criminal jurisdiction. The governor has 1,250 doll. a year of salary, and the judges of the supreme and circuit courts, who are elected for 6 years, have each 1,500 doll. a year. Ample provision has been made for education, and an institution for the instruction of the blind has been opened at Janesville. Maddison is the seat of government, but Milwaukie is by far the largest town of the state. Wisconsin, after having been formed into a territory, was admitted as a state into the Union, 29th May, 1848.

WISMAR, a town and sea-port of N. Germany, in Mecklenburg-Schwerin, cap. lordship of its own name, at the bottom of a deep bay at the confluence of the Stör with the sea, 18 m. N. by E. Schwerin, on a branch of the railway from Schwerin to Rostock. Pop. 13,128 in 1862. The harbour, which is very extensive, is commodious and safe, being nearly land-locked by the islands of Poel and Wollin. Close to the town there is from 8 to $8\frac{1}{2}$ ft. water; in the inner roads there are from 12 to 13 ft., and in the outer from 16 to 20 ft. water. The town is fortified, and has 3 churches, 3 hospitals, several schools, with manufactures of tobacco, playing cards, sail-cloth, and other fabrics, breweries, and distilleries. Ship-building is also carried on to some extent, and Wismar is second in commercial importance to no town in the Grand Duchy but Rostock. The articles of import and export are the same as at Rostock (which see), but the trade of the town is more limited. It appears to have been founded in 1229, and afterwards became one of the Hanse towns.

WISSEMBOURG, a town of France, dép. Bas-Rhin, cap. arrond., on the Lauter, on the Bavarian frontier, 33 m. N. by E. Strasbourg, on the railway from Strasbourg to Landau. Pop. 4,920 in 1861. Wissembourg is a fortified town, and of some importance, as it commands a defile leading from the plain of the Rhine into the Vosges mountains, and is connected with a system of military works stretching along the course of the Lauter for some distance, called the lines of Wissembourg. It has an old collegiate church, built in 1288; a Protestant church, in which is a bust of Luther, and

manufactures of hosiery, straw hats, soap and earthenware. It originated in an abbey founded here in the 7th century, and was annexed to France by the treaty of Ryswick.

WITEPSK, or VITEBSK, a government of European Russia, principally between the 55th and 57th degs. of N. lat., and the 26th and 32nd of E. long., having NE. the gov. of Pskof, SE. Smolensko and Moghilef, SW. Minsk and Courland, and NW. Riga. Area 16,500 sq. m. Pop. 781,741 in 1858. Surface generally level, though on the banks of the rivers there are occasionally some low hills. Rivers and small lakes are numerous: of the former, which all flow towards the Baltic, the Dwina is the principal. Notwithstanding the soil is but of medium fertility, and agriculture is in a very backward state, more corn is produced than is required to supply the wants of the inhabs. Hemp and flax are grown on a large scale, pease, beans, hops, and fruit in the smaller enclosures. The forests are very extensive, 121,600 deciatines of forest land belonging to the crown. The grass lands are also extensive, and a good many horses and cattle are reared, though of inferior breeds. The sheep yield only coarse wool, and honey is also of inferior quality. The mineral products and manufactures are insignificant, the last being, with the exception of a few cloth factories, almost wholly restricted to distilleries and tanneries. The trade of the government is facilitated by the Dwina and the canal of Berezina: it is principally in the hands of the merchants of the principal towns, many of whom are Jews. This gov. is divided into 12 circles; chief towns, Witepsk, the cap., Wieliz, Dunaburg, and Polotsk.

WITEPSK, a town of Russia, cap. of the above gov., on both banks of the Dwina, where it receives the Viteba, 330 m. S. by W. Petersburg. Pop. 22,933 in 1858. The town is irregularly built, and is surrounded by old walls: it has numerous Greek and some Rom. Cath. churches, convents, and synagogues. Though by far the greater number of its houses are of wood, it has some dwellings of stone, a high school, a bazaar, an old castle, several hospitals, with manufactures of woollen cloths and tanneries. The Grand Duke Constantine, brother of Czar Alexander I. of Russia, died at Witepsk on the 27th June, 1832.

WITNEY, a market town and par. of England, co. Oxford, hund. Hampton, on the Windrush, a tributary of the Thames, 10 m. W. by N. Oxford. Area of par. 7,450 acres; pop. of ditto, 5,180 in 1861. The town is well built and cheerful, the main street being on the high road between Burford and Woodstock. The town-hall, a stone building, has beneath it an area used for a market place. Near it is the market cross, erected in 1683, and repaired by subscription in 1811; and in the High Street is the staple or blanket hall, a handsome stone edifice, built in 1721. The church, at the S. extremity of the principal street, is one of the handsomest in the co., being a large cruciform structure in the early English, Decorated, and Perpendicular styles, with a tower and lofty spire, ornamented with minarets. In the N. transept is a fine window, and within the building are several ancient monuments, and a handsomely carved and gilded burial chapel. The living, a valuable rectory, being worth 1,290l. a year, is in the gift of the bishop of Winchester. Here also are places of worship for Wesleyans and Independents. The free grammar school, founded in 1660, for 30 boys, comprises a spacious school-room, library, and apartments for the master. Another free school, with a small endowment, was established in 1693. A school for the education, clothing, and apprenticeship of weavers' sons was

founded in 1782, and it has besides a national school and several almshouses.

Witney was long celebrated as a principal seat of the blanket manufacture; and, in the reign of Queen Anne, the weavers of the town and adjacent district were incorporated into a company. But the trade has long been of very inferior importance, and the weavers' corporation has fallen into disuse. Since the peace especially, and the introduction of machinery into the business, blanket weaving has rapidly declined at Witney, and most part of the fabrics now sold as Witney blankets are made in Glamorganshire, and elsewhere. Some rough coatings, tiltings for barges and waggons, and felting for paper makers, are, however, made here. The glove manufacture also employs a few hands; wool stapling is carried on to some extent, and the town has a considerable trade in malt.

Witney was made a parl. bor. in the time of Edward II., but its privilege was withdrawn on the petition of the inhabs. in the succeeding reign. It is governed by 2 bailiffs and 2 constables, chosen at the annual court leet; and a court baron, presided over by the duke of Marlborough, is opened twice a year. Witney is of considerable antiquity, and its manor is stated to have been one of those given to the monastery of St. Swithin, Winchester, in the reign of Edward the Confessor.

WITTENBERG, a town of Prussian Saxony, formerly the cap. of the Electorate Saxony, now the cap. of a circ. of the reg. of Merseburg, on the Elbe, and on the railway between Berlin and Leipzig, 39 m. SW. the former. Pop. 12,026 in 1861. Though metamorphosed from the quiet seat of a university into a garrison and fortified town, Wittenberg has a peculiarly dull and melancholy aspect. It is, however, highly interesting, as the cradle of the Reformation, Luther and Melancthon having been professors in its university, and their remains being deposited in its cathedral. A statue of the great reformer in bronze, by Schadow, of Berlin, was erected in the market-place in 1821. It represents, in colossal proportions, the full-length figure of Luther, supporting on his left hand the Bible, kept open by the right, pointing to a passage in the inspired volume. The pedestal on which the statue stands is formed of a solid block of red polished granite, 20 ft. in height, 10 ft. in width, and 8 ft. in depth. On each of its sides is a central tablet, bearing a poetical inscription, the import of the principal being that 'if the Reformation be God's work, it is imperishable; if the work of man, it will fall.' Over the figure is a very handsome light Gothic canopy, supported by four corner pillars, and surmounted by eight filigree-pointed pinnacles. This canopy is beautifully cast in iron. Taken altogether, the monument does honour to the state of the arts in Prussia.

The graves of Luther and Melancthon in the cathedral are marked by two plain tablets. The altar-piece is by Lucas Cranach, a burgomaster of Wittenberg, the town-hall of which he has embellished with pictures of Luther and of the subjects of the Ten Commandments. It was against the walls of this church that Luther suspended his 95 theses against papal indulgences; and outside the E. gate of the town he publicly burnt the bull for his excommunication. Luther's apartment in the old Augustine convent remains in much the same state as in his time; and the autograph of Peter the Great on the wall is preserved by a glass covering. Wittenberg, having ceased to be a cap., was found inadequate to the support of its university, which was accordingly removed to Halle. It still has, however, a gymnasium and an ecclesiastical seminary, and is the seat of a board of

taxation and of the usual circle courts. From its situation on the Elbe, in a fertile country, with both iron and coal in its neighbourhood, it possesses great commercial advantages: but its trade is insignificant, and it has only a few manufactures of linen and woollen goods.

It has frequently suffered from sieges, particularly in 1756; and in 1814, when it was taken by storm from the French.

WOBURN, a market town and par. of England, co. Bedford, hand. Manshead, on the Great N. road, 38. m. NNW. London. Area of par. 3,200 acres. Pop. 1,764 in 1861. The town consists of a main street, about 1-3rd m. in length, with the market-cross nearly in its centre; and, having been nearly burnt down in 1724, it is comparatively well laid out and well built. The market-house, a handsome edifice, originally erected by the Bedford family, was rebuilt, at their expense, by Blore, in 1830. The same artist has also restored the church, an edifice in the perpendicular style, built by the last abbot of Woburn, having a tower detached from its main body. In the chancel is, among others, a curious monument to Sir F. Staunton and his family. The living, a curacy, in the gift of the Duke of Bedford, is worth 251*l.* a year. The free-school, founded by the Earl of Bedford in 1582, has an income of 50*l.* a year, and furnishes instruction to 150 boys on the Lancasterian plan. Almshouses, founded in 1672, for 24 widows, have an income of 80*l.* a year, and there are several minor charities. Petty sessions monthly, and manorial courts occasionally, are held in Woburn. The inhabitants are either occupied in lace-making and straw-plaiting or are employed by the Bedford family. Markets on Fridays; fairs four times yearly for farm stock.

Immediately E. of the town is Woburn Park, with Woburn Abbey, the principal seat of the Duke of Bedford. It derives its name from its occupying the site of a Cistercian abbey, founded here in 1145, and granted to the Russell family in the time of Edward VI. The present mansion, which was built about 1745, has since been greatly improved and enlarged. It is a quadrangular edifice, its principal or W. front being of the Ionic order, with a rustic basement. The interior of this noble pile is splendidly fitted up, and many of the apartments are enriched with valuable paintings, both by the old masters and British artists. The drawing-room, thence called Venetian, has a fine series of 24 views in Venice, by Canaletti. In the hall is an anc. mosaic pavement, brought from Rome. A sculpture gallery, 138 ft. in length by 25 ft. in breadth, with a flat dome in its centre, supported by 8 antique marble columns, has a fine collection of antique marbles, including the famous Lanti Vase, of Parian marble, 6 ft. 3 in. in diameter, and 6 ft. in height, exclusive of the plinth on which it stands. It is of the lotus form, has two magnificent handles, and is beautifully sculptured. This admirable specimen of ancient art was found among the ruins of Hadrian's Villa at Tivoli, of which it had no doubt formed a principal ornament. Here, also, is a fine cast of the Apollo Belvidere and Westmacott's statue of Psyche. In the W. wing of the edifice is the Temple of the Graces, erected in 1818, to receive Canova's magnificent group of the Graces, placed on a circular pedestal in the centre. The library is both extensive and valuable; and at one of its extremities is a room appropriated to Etruscan antiquities. The stables, riding-house, and tennis-court are in a detached building, connected with the mansion by a colonnade, $\frac{1}{4}$ m. in length. The greenhouse, designed by Sir J. Wyattville, is a handsome building, 140 ft. in length, and in

which, with a great variety of valuable plants, are some fine statues. The park, 12 m. in circuit, surrounded by a wall 8 ft. in height, is beautifully diversified, abounding in wood and water, and well stocked with deer.

WOKINGHAM, or **OAKINGHAM**, a market-town and par. of England, co. Berks, hund. Sonning, on the confines of Windsor Forest, $6\frac{1}{2}$ m. SE. Reading, and 37 m. SW. London by South Western railway. Area of par. 8,450 acres. Pop. 4,144 in 1861. The town consists of several streets, meeting in a central market-place, in which is the market-house and town-hall. The church, in the perpendicular style, is a fine old edifice. The Wesleyans, Baptists, and other dissenters have meeting-houses here; and, besides Sunday schools, there is a free school, with an income of above 45*l.* a year, at which between 30 and 40 boys are instructed on the Madras system. The aggregate income of the various charities in Wokingham amounts to nearly 530*l.* a year. About 1 m. from the town is a hospital, under the direction of the Drapers' Company, London, founded in 1665, for 16 poor men and a master. The inhabs. of Wokingham are employed principally in weaving silk stuffs and gauzes, and in making shoes.

The town was incorporated by James I., and is governed by an alderman, recorder, 7 burgesses, and other officers, chosen on Easter Wednesday, who hold petty sessions and some other courts. Formerly all the courts for Windsor Forest were held at Wokingham. Markets, Tuesdays; fairs, April 23, June 11, Oct. 11, and Nov. 2, for horses and cattle.

WOLFENBUTTEL, a town of Germany, duchy of Brunswick, cap. circ., on the Ocker, 8 m. S. Brunswick on the railway from Brunswick to Magdeburg. Pop. 8,947 in 1861. The town was formerly fortified, but its defences are now in a ruinous state. It consists of the citadel, the town-proper, called Heinrichstadt, and the quarters or suburbs of Augustusstadt and Gotteslager. It is well built; and its streets, which are broad and regular, are paved and watered by branches of the Ocker. It has several churches worth notice; and a magnificent library, comprising not less than 190,000 vols. It includes a large collection of bibles, among which is the one that belonged to Luther, with autograph notes. His marriage ring, doctor's ring, spoon, drinking-glass, and one of his many portraits by L. Cranach are also preserved here. The old castle of the lords of Wolfenbüttel has been converted into a prison; and the ducal castle now serves for a factory. It has a large workhouse, hospital, orphan asylum, gymnasium, and several city schools; and is the seat of the superior court of appeal for the states of Brunswick, Waldeck, and Lippe, and of several subordinate courts. It has manufactures of lacquered and japanned wares, paper hangings, leather, and tobacco; with some trade in corn and linen yarn, and 5 annual fairs. Its neighbourhood is fertile, but marshy and unhealthy.

WOLGA, or **VOLGA** (an. *Rha*), the largest river of Europe, through the E. part of which it flows; its basin, comprising the central part of European Russia, has the basin of the Dwina to the N., of the Don and Dniepr to the S., and of the Oural to the E. The Wolga was formerly considered as constituting a part of the boundary-line between Europe and Asia; but since the limits of these continents have been removed to the Caucasus and the Caspian, its basin, with those of its tributaries, lie wholly within Europe. From its source to its mouth its length is estimated at about 2,000 m., being about 200 m.

longer than the Danube. The area of its basin has been supposed to include upwards of 636,000 sq. m., or considerably more than twice as much as the basin of the Danube, and 8 times as much as that of the Rhine. (Müller, *Stromsystem der Wolga*, 79.)

The Wolga has its source in a small lake at the W. extremity of the gov. Tver, in lat. $57^{\circ} 10'$ N., long. $32^{\circ} 20'$ E., 220 m. SSE. Petersburg; on the E. declivity of the Valdai plateau, near the source of the S. Dwina, the Dniepr, and other large rivers, at an elevation of 895 ft. above the level of the sea. (Müller, 113.) It flows at first SE., and afterwards NE., through the govs. of Tver and Jaroslavl; at Mologa it turns to the ESE., which direction it generally pursues through Jaroslavl, Kostroma, Nijni Novgorod, and Kasan, to the confluence of the Kama, about lat. $55^{\circ} 8'$, and long. $49^{\circ} 30'$. Thenceforward it runs generally SSW. through the govs. of Simbirsk and Saratof to Tzaritzin, where it approaches within 82 m. of the main stream of the Don, their confluence being prevented by an intervening chain of hills.

It then turns again to the SE. through the gov. Astrakhan, and pours itself into the Caspian, on its NW. side, through an extensive delta by more than 70 mouths, the W. and largest of these being in lat. 46° N., and long. 48° E. Throughout its long course it waters, with its tributaries, some of the most productive portions of European Russia and the region which was anciently the nucleus of the Russian monarchy. Tver, Jaroslavl, Kostroma, Nijni Novgorod, Simbirsk, Saratof, Astrakhan, and several other towns are situated on the Wolga; and Kasan is on one of its tributaries within a short distance of the main stream.

The principal affluents of the Wolga are the Tvertza, Mologa, Sheksna, Unja, Vetluga, and Kama, from the N. and E., and the Oka and Sura from the W. and S. The Kama, which is by far the largest, is, also, the last tributary of any consequence which it receives. It rises in the gov. of Viatka, about lat. 58° N., long. $53\frac{1}{2}^{\circ}$ E., and flows with a very tortuous course, at first NE. to about lat. $60^{\circ} 20'$, but afterwards in general S. or SW. through the govs. of Perm and Kasan, and between those of Viatka and Orenburg. After a course of nearly 1,000 m. it joins the Wolga, bringing with it a volume of water nearly equal to that of the latter. Its basin is supposed to comprise about one-third part of that of the Wolga. Perm is among the towns on its banks.

The Oka rises in lat. $52^{\circ} 10'$ N., long. 36° E., in the gov. of Orel; through which, and the govs. of Tula, Kaluga, Moscow, Riazan, Tambof, Vladimir, and Nijni Novgorod, it flows in a very tortuous, but mostly NE. direction, joining the Wolga at Nijni Novgorod after a course of nearly 700 m. Its basin is supposed to comprise 127,000 sq. m. (Müller.) It has several important affluents. Though rapid, it is navigable to Orel not far from its source. The waters of the Kama and Oka are, like those of the Wolga, remarkable for their purity; and all of them are famous for their fish. The Wolga is, in fact, believed to be more prolific of fish than any other European river; and its fisheries are an abundant source of employment and of food. The fish usually taken comprise sturgeon, the roes of which furnish the caviar, of which vast quantities are sent from Astrakhan to all parts of Russia, with salmon, sterlet, tench, pike, perch, and beluga. The sterlet, a small kind of sturgeon, supposed to be peculiar to the Russian and Siberian rivers, is much prized by the Russian epicures. Exclusive of caviar, the

exports from Astrakhan include large quantities of cured fish.

From its abounding with islands, particularly in the lower part of its course, the breadth of the Wolga is very variable. At Tver, however, it is nearly 600 ft. in breadth; at Nijni Novgorod, after it has received the Oka, about a verst, or 1,200 ft.; and at Astrakhan it is usually 1½ m. across. But this is not the case during the entire year, for, on the melting of the ice and snow in spring, it is subject to great risings, and inundates large tracts of the surrounding country. The rise begins in April; its height varies greatly in different places, but is greatest in the middle portion of the river's course. At Tver the total rise is about 12 ft. above its summer level; at Jaroslavl and Nijni Novgorod 18 or 20; at Kasan 25 or 30; and at Saratof from 30 to 40 ft. But downwards beyond this point, after which the Wolga receives no affluent of any consequence, and its bed becomes more capacious, the height of its rise gradually diminishes, being at Tzaritzin from 25 to 30 ft., and at Astrakhan only from 6 to 8, or seldom so high as 12 ft. The time of subsidence also varies considerably in different parts: at Nijni Novgorod the river is commonly confined again within its bed by the beginning of June; at Kasan not till the middle of the same month; and at Astrakhan it does not diminish to its ordinary height till after the summer solstice. According to recent discoveries, the surface of the Caspian is 101 ft. below the level of the Black Sea, which would give to the Wolga (estimating its course at 2,000 m.) an average descent of about 5·4 inches per mile: from the junction of the Kasan with the Wolga, the fall of the latter, Humboldt says, is greater than that of either the Amazon or the Nile, and almost as great as that of the Oder. (See Geog. Journ. viii. 135.) Though rather a rapid river, yet, as it runs through a flat country, with an immense volume of water, in a bed unbroken by cataracts, though not free from sand-banks, it is navigable for flat-bottomed boats nearly to its source. Not far below this point it is connected by a canal with the S. Dwina, establishing a direct water communication between the Caspian and the Baltic. The Ivanofska canal, in the gov. of Tula (which unites the Upa, a tributary of the Oka, with the Don), opens a communication between the Caspian and the Black Sea; and, by means of the Vischniej Volotchok canal, between the Msta and Tvertza rivers, and the canal between the Sestra and Istra, in the gov. of Moscow, Petersburg and Moscow are directly connected. Other canals connect the basin of the Wolga with that of the N. Dwina and the Lake Onega; and nowhere else has so extensive a system of inland navigation been effected by artificial means, with so little labour. This navigation is, however, suspended by the frost for at least 160 days each year.

Though the situation of the Wolga, remote from the great marts of Europe, Asia, and Africa, with its embouchure in the Caspian, renders it of much less commercial importance than it would be under other circumstances, it is still the main artery of Russia, and the grand route of the internal traffic of that empire. It has been estimated that in the first thirty years of the present century, from 600 to 700 vessels a year came down the Wolga to Astrakhan, while from 300 to 400 sailed from that port to others on the upper course of the river. Unfortunately, it would seem as if the Wolga had been for some considerable period decreasing in depth; and it is said that of late years sand-banks have accumulated so much, particularly between Nijni Novgorod and Kasan,

that the vessels laden with salt from Perm, which in the early part of last century used to bring cargoes of from 130,000 to 150,000 lbs., can now only convey cargoes of about 90,000 lbs.; and in the portion of its course now referred to, it is navigated with difficulty even by the two-masted vessels of Astrakhan.

WOLSINGHAM, or **WALSINGHAM**, a market town and par. of England, co. Durham, Darlington ward, on the Wear, 12½ m. WSW. Durham. Area of par. 24,780 acres. Pop. 5,531 in 1861. The town is pleasantly situated, but irregularly built. The church is an ancient structure, with beautiful font of Weardale marble. The living, a rectory worth 791*l.* a year nett, is in the gift of the Bishop of Durham. The remains of an old manor-house, belonging to the former bishops, and enclosed by a moat, are near the church. The grammar-school, founded in 1612, with an income of above 65*l.* a year, besides 30 pay scholars, supplies gratis instruction to 26 boys, in reading, writing, arithmetic, and the classics. Here, also, are several other schools, and endowments for the poor not receiving parochial relief. The inhabs. are principally employed in the manufacture of linen and woollen cloths, tools and agricultural implements; or in the coal, lead, and limestone works in the vicinity. Petty sessions are held weekly; and a court-leet twice a year, at which debts of 40*s.* are recoverable. Markets on Tuesdays: fairs, May 12 and Oct. 2.

WOLVERHAMPTON, a parl. bor., market town, and par. of England, co. Stafford, hund. Seisdon, in one of the principal iron manufacturing districts, 18 m. NW. Birmingham, and 126 m. NW. London by London and North Western railway. Pop. of par. 118,832, and of parl. bor. 147,670, in 1861. The par., which is of great extent, comprises 5 townships, 4 of which, including the towns of Bilston and Willenhall, with the adjoining par. of Sedgley, are included in the parl. bor.; the area of which amounts to 16,630 acres. Wolverhampton stands on an eminence commanding fine views of the surrounding country, and though irregularly laid out, is not ill-built; but, from the many furnaces and forges in the town and neighbourhood, it has a blackened appearance. There are some good modern residences in the suburbs. Four of the principal streets diverge from the market-place. The town is well lighted, partially paved, and supplied with water from wells sunk in the rock on which it is built. The collegiate church of St. Peter, on the most elevated position in the town, is a large cruciform structure, chiefly in the perpendicular, but partly, also, in the decorated and early English styles. It has a tower, the upper part of which is late perpendicular, and a much finer composition than the other portions of the church. The chancel is modern; the nave has a rich stone pulpit, and in the churchyard is a rudely sculptured cross, much defaced by time. This church was formerly considered one of the king's free chapels, and was attached by Edward IV. to the deanery of Windsor. The living, a vicarage worth 193*l.* a year, is in the gift of the dean of Windsor. St. John's church, a handsome stone edifice, on the S. side of the town, erected by subscription, in 1761, is a curacy worth 200*l.* a year, in the gift of the Earl of Stamford. St. George's, a building of Grecian architecture, St. Paul's, a Gothic structure, and various other churches, have been erected of late years. Besides a Rom. Cath. chapel, there are numerous dissenting meeting-houses, to all of which, as well as to the churches, well-attended Sunday-schools are attached. The free grammar-school, founded by Sir Stephen Jennings, a native

of the town, who was lord mayor of London, in 1668, has an endowment yielding about 1,200*l.* a year. It is managed by 40 trustees, who allow the head-master 500*l.* a year. It is open to all boys of the par., and attended by about 200 pupils. Sir W. Congreve and Abernethy, the surgeon, were educated at this school. Besides a blue-coat charity for 36 boys and 30 girls, of very ancient foundation, with an income of 240*l.* a year, there are national and British schools; and considerable funds exist for distribution among the poor. Among the other public buildings are an exchange, and public baths, built 1853; Lee's orphan asylum, founded 1853; an athenæum, and new music hall. A dispensary was established in 1821, for which an eligible building was erected in 1826, and, in 1813, a union-mill, for grinding corn for the poor at a cheap rate, was built by shares at a cost of 14,000*l.* Wolverhampton has also a public news-room with an extensive library, theatre, assembly and concert-rooms and mechanics' institute. W. of the town is a fine race-course, with a grand stand, where races take place annually in August. Two weekly newspapers are published in the town.

Most departments of the hardware manufacture, excepting cutlery, are carried on here and in the adjacent town of Bilston and the district. Wolverhampton has been long celebrated for her locks, of which she almost exclusively engrossed the manufacture down to a comparatively late period. At present, however, the most expensive and best locks are made in the metropolis, and the lock trade is also carried on in Birmingham; but the town still enjoys the largest share of the business. The manufacture of japanned ware and tinned plates may be regarded as her staple business; and in addition she furnishes carpenters' tools, files, screws, hinges, steel mills, and machinery. Immense quantities of nails are made in the surrounding villages.

Wolverhampton, Bilston, and the other places within the limits of the par. bor., are wholly indebted for their rapid rise and large pop. to the facilities they enjoy for carrying on the iron trade. In the vicinity are all but inexhaustible mines of coal and ironstone, the main bed of coal being 30 ft. thick, with strata of ironstone above and below. The district has also the farther advantage of being connected by numerous canals, and several lines of railway, with all the great shipping ports of the empire. The whole country to the S. and E. of the town is covered with furnaces, forges, rolling mills, foundries, ironstone and coal-pits; and though the trade is occasionally much depressed, the advantages enjoyed by the district for the production and manufacture of iron are such as can hardly fail to insure its prosperity.

The town is under the jurisdiction of the co. magistrates, but is locally governed by two constables and other officers, chosen at an annual manorial court. Petty sessions for the hundred are held here, and there is a county court. The Reform Act conferred on Wolverhampton, Bilston, and the district included within the par. bor., the important privilege of sending 2 mems. to the H. of C. Reg. electors, 4,533 in 1865. The new poor-law was introduced here in 1836, when the townships of W. Hampton, Bilston, Willenhall, and Wednesfield were formed into the 'W. Hampton Union.' A superior and spacious 'Union house' has been erected.

Though of great antiquity, the earliest records of Wolverhampton date only from the end of the 10th century, when Wulfruna, Duchess of Northampton, founded a monastery here, of which, however, there are now no remains. A fire, which

continued for five days, destroyed the greater part of the town in 1590.

WOODBIDGE, a market town, par. and river-port of England, co. Suffolk, on the Deben, 8 m. from the sea, 7½ m. ENE. Ipswich, and 78 m. NE. London by Great Eastern railway. Area of par. 1,650 acres. Pop. of do. 4,513 in 1861. The town is on the slope of a hill, and consists of two principal streets, an open space called Market Hill, and some narrow thoroughfares: it has many good houses, and is well paved and lighted. In the centre of the Market Hill is the sessions house, a brick edifice, in the lower part of which the corn market is held. The church, a noble edifice, said to date from the time of Edw. III., consists of a nave, chancel, and two side aisles, the roofs of which are supported by 14 fine slender pillars; its outer walls are constructed of black flints, and it has a square tower 108 ft. in height. On its S. side was anciently an Augustine priory, founded by one of the Rous family in the 12th century. Here, also, is a free grammar school for 10 boys, sons of the poorer inhabs. of the town, who are instructed in Latin and Greek, and fitted for the university, with national, Lancastrian, and Sunday schools, and almshouses for 12 poor men and 3 women, founded and endowed in 1587. The income of the town lands is chiefly applied to parochial repairs. A small theatre was erected in 1813.

Woodbridge is a member of the port of Yarmouth, and the Deben being navigable thus far, for vessels of 120 tons, it has a considerable trade with London, Hull, and Newcastle, exporting corn, flour, and malt, and importing coal, timber, wines, spirits, and groceries. It has several docks for the building of vessels, with convenient wharfs and quays. Woodbridge is governed by a visitor and two guardians, chosen by the parishioners. Quarter sessions for the liberty of St. Ethelred and for six adjacent hundreds are held here; and petty sessions weekly. Market day, Wednesday; fairs, April 5 and Oct. 31, for cattle.

WOODSTOCK (NEW), a parl. and munic. bor., and market town of England, co. Oxford, hundred Wootton, par. of Bladon; on the small river Glyme, which supplies the magnificent piece of water in Blenheim Park, 8 m. NNW. Oxford, and 69 m. W. London by Great Western railway. Pop. of bor. 7,827, and of par. 1,201 in 1861. The old parl. bor. included only a portion of the town; but the modern parl. bor. includes the whole of the latter, with a district extending about 4 m. on every side, comprising several adjacent villages and hamlets, and having an area of 21,640 acres. This is a clean, well built, country town; the streets are well paved, and well kept, and the houses, which are mostly of stone, are of a superior class; but it has, notwithstanding, a dull and inanimated appearance, and is not prosperous. The church is a handsome structure, partly rebuilt in 1785, when a tower was added to its W. extremity. The living is a curacy annexed to the rectory of Bladon, worth 329*l.* a year, and in the gift of the Duke of Marlborough. Here, also, are places of worship for Baptists and Wesleyans. The town-hall, erected in 1766, at the expense of the then Duke of Marlborough, has under it the market-place. A free grammar school, founded in 1585, affords instruction to about 20 boys; but the endowment for its support is small, and the master's salary is partly made up by the corporation; it has, besides, an endowed school, with an income of 75*l.* a year, in which 24 children are educated, partially clothed, and apprenticed, with almshouses for widows, and several minor charities.

Woodstock had formerly a considerable manu-

facture of polished steel articles, much esteemed for their delicate workmanship; but this business is now nearly or wholly extinct. The manufacture of doe-skin gloves, which was introduced at a later date, is now almost the only branch of industry carried on in the town. But this branch has, also, declined of late years, principally in consequence of the substitution of thread and cotton for leather gloves.

The bor. received its present charter of incorporation from Henry VI.; but that by which it has been latterly governed dates from the 16th of Charles II., the corporate body consisting of a mayor, 4 other aldermen, a high steward, recorder, and other officers. The annual court leet or sessions, granted to the bor. by charter, has been discontinued since 1829; but petty sessions, and a court of record are opened monthly. Woodstock was a bor. by prescription previously to its incorporation, and returned 2 mems. to the H. of C. from the 13th of Elizabeth down to the passing of the Reform Act, which deprived it of 1 mem., at the same time that the boundary of the parl. bor. was altered, as already stated. Previously to the Reform Act the franchise was vested in the mayor, aldermen, and freemen of the bor.; but substantially, and in fact, it was a nomination bor., belonging to the Duke of Marlborough. Reg. electors 315 in 1865. Market day, Tuesday; fairs, seven times a year, chiefly for cattle, horses, cheese, and hardware.

Old Woodstock stood in a low situation a little N. of the town, on the Glyme, and has now only a few houses and one ancient mansion. Woodstock was long a royal residence. A palace, or manor-house, on the N. bank of the Glyme, was the residence of Henry II., and the scene of some of the adventures of the fair Rosamond; but all traces of this building have long since disappeared. Edward I. held, in 1275, a parliament at Woodstock; and it also was the birth-place of his second son Edmund, and of the eldest son of Edward III., the illustrious Black Prince. It was subsequently inhabited by several of our monarchs; and Elizabeth was for a while imprisoned here. But every part of this more recent palace has also been pulled down. Chaucer, the great improver of the English language and versification, is supposed by many to have been a native of Woodstock; where, it is alleged, he first saw the light in 1528. At all events he frequently resided in the town; and some traces still exist of the house which he occupied.

At present Woodstock derives its whole importance from its being in the immediate vicinity of Blenheim Palace and Park, the seat of the Duke of Marlborough. (See **BLENHIM PARK**.)

WOOLER, a market town and par. of England, co. Northumberland, Glendale ward, on the E. declivity of the Cheviot hills, 42 m. NNW. Newcastle. Area of par. 4,620 acres. Pop. do. 1,693 in 1861. The town is of high antiquity, and at one period was a good deal resorted to by invalids. It consists of several streets branching from the market place, and has a public library, mechanics' institute, dispensary, and many dissenting places of worship. The church is a neat but plain building, erected about the middle of last century: the living, a vicarage, worth 478*l.* a year, is in the gift of the bishop of Durham. A free school, with a small endowment, is the only charity mentioned as existing here. Courts leet and baron are held annually by the lord of the manor.

In the neighbourhood are the vestiges of ancient encampments. At Homildon, about 2 m. from the town is a pillar, erected to commemorate the total defeat, in 1402, of an army of 12,000 Scotch-

men, under Earl Douglas, by the forces of the Earls Percy and March.

WOOLWICH, a parl. bor., market, and seaport town of England, co. Kent, on the S. bank of the Thames, 7 m. E. London, and 2½ m. E. Greenwich, on the North Kent railway. Pop. of par. 41,695 in 1861. Though latterly a good deal improved, the older parts of the town, near the river, have narrow streets, and are comparatively mean, dirty, and badly built; but in the more modern portions, and especially between the old town and the barracks, the streets and houses are of an improved and far more respectable description. Woolwich, however, derives its entire importance from its dockyard, arsenal, and other great naval and military establishments; and is principally inhabited by individuals dependent upon or connected with them. The parish church, in a conspicuous situation, with a tower at the W. end, was rebuilt towards the middle of the last century. The living, a rectory, worth 740*l.* a year, is in the gift of the bishop of Rochester. Besides the par. church, Woolwich has several district churches, an Ordnance chapel on the road to Plumstead, a chapel in the barracks, a proprietary episcopal church near the arsenal, a Scotch church, and numerous meeting houses for different classes of dissenters. The charitable institutions comprise an almshouse for 5 poor widows, endowed, in 1560, by Sir Martin Bowes, lord mayor of London, and two charity schools, one for 30 girls, and one for educating, clothing, and apprenticing poor orphan boys, sons of such shipwrights as have served their apprenticeship in the dockyard; and national and other public schools, in which about 1,000 children are daily instructed, exclusive of the Sunday schools attached to the par. church and the dissenting chapels, where upwards of 2,000 children are taught. Among the places of amusement is a small theatre. A mineral spring on the N. of the common possesses valuable medicinal properties. The North Kent railway has two stations in the town, one near the dockyard, and the other close to the arsenal.

Dockyard.—This, though not the most extensive, is the most ancient royal dockyard in the kingdom. Some uncertainty exists as to the precise date, but it is believed to have been established as early as 1512; and it is certain that it was placed upon a permanent footing in the latter part of the reign of Henry VIII. It presents a frontage to the river of nearly 4,000 ft., but is of irregular breadth. It has been, of late years, greatly improved and extended, and contains at present about 62 acres. It has six building slips: 2 for first-rates, 2 for line-of-battle ships of inferior size, and 2 for smaller ships.

Although some very large ships have been built in this dockyard at different periods, such as the Royal George (lost at Spithead), the Nelson in 1814, and the Trafalgar in 1841, yet considerable disadvantages are felt in the constructing of such ships from the shallowness of the water and the accumulation of mud in the river; and it has, in consequence, been determined to build the largest class of men-of-war in the other dockyards, and to make this the principal yard for steam-ships belonging to the royal navy. With this intention a factory was built in 1839, consisting of 2 ranges of handsome and substantial buildings, each 440 feet in length by 26 in breadth, for the manufacture of steam-engines and boilers. The factory contains a foundry and forges, with fan-blowing machines for the furnaces, and a variety of machines for punching, shearing, plate-bending, drilling, boring, planing, turning, shaping, bolt-screwing, and similar purposes. The machinery

was made by the most eminent manufacturers in the kingdom. There is another building 232 ft. in length, by 66 ft. in breadth, with a chimney 190 ft. in height, into which all the flues of the factory are led. These additions give the means of doubling the work performed, and enable the Admiralty to furnish the whole of the steamships with the necessary machinery.

There is an outer basin, comprising an area of 120,000 sq. ft., in which ten or a dozen steamships of different sizes may conveniently lie. An inner basin of 160,000 sq. ft. area, on the site of the mast pond, allows two first-class steamships to lie alongside the factory and be simultaneously fitted with their engines, boilers, and other machinery. A magnificent dock, entirely composed of massive blocks of granite, is capable of receiving a 120-gun ship, besides which there are three smaller ones of similar construction. The smithery, constructed by the late Mr. Rennie, is on a very grand scale, and is suitable for the forging of the largest anchors, and other heavy articles. It contains 37 forges, with 2 lift hammers, weighing $4\frac{1}{2}$ tons each, and 3 tilt hammers of 18 cwt. each; there are also 3 air and 2 blast furnaces, with a blasting apparatus of a very scientific description. There are two steam-engines in the smithery, one of 20 and another of 14 horse-power. The anchors are tested by a powerful hydraulic machine, made by Bramah, capable of applying a pressure of 100 tons. The pitch and tar vault is constructed so as to admit of its easy inundation in case of fire. Large saw mills have also been constructed, similar to those in the carriage department in the arsenal, for cutting the timber for service.

The mast houses, mast slip, mast ponds, and warehouses, are all on a very extensive scale, and the whole is thoroughly organised and in the most efficient state. A large ropery was formerly attached to the dockyard, but its situation not admitting of the introduction of machinery, it has been abandoned, the buildings removed, and the site built upon. The workmen have been enrolled in a dockyard brigade, and are commissioned by the clerks and civil officers of the various departments, the superintendent acting as commandant. Instruction is given during the summer season in the infantry and artillery drill.

Arsenal.—Woolwich is the head-quarters of the Ordnance military corps, viz., the Royal Horse and Foot Artillery, the Royal Sappers and Miners; and it is also the principal establishment in the kingdom for the provision of warlike matériel for the army and navy. The Royal Arsenal, formerly called the Warren, admirably situated on the E. side of the town, appears to have been used as a gun-wharf and powder magazine from about the middle of the 17th century; but it was not until the removal of the foundry from Moorfields, in 1720, that it began to assume the importance it has since attained. It comprises within its boundaries about 110 acres, or, including a part of the Plumstead marshes, used as a review and practising ground, from which it is separated by a canal communicating with the Thames, it may extend over nearly 300 acres. The following are the principal departments into which it is divided: 1st. The *Royal Brass Foundry*, erected by Sir John Vanburgh, in 1719, on a site chosen by a young Swiss named Schalch, under whose direction the foundry had been placed on its removal from London. In it are now cast all the brass ordnance used in the service. It contains 3 furnaces, the largest capable of melting 16 tons of metal, sufficient for about twelve 24-pounders; with accommodation for making moulds, boring,

turning, and polishing the guns. This department has the inspection and proving of all ordnance for the army and navy, and the affixing of the sights and tangents to them. The iron ordnance is all cast by contract according to plans furnished. All brass ordnance are moulded and cast solid in this foundry. They are afterwards bored, turned, and completed by machinery, and properly engraved. Other articles are sometimes cast, as the statues of the Duke of York and Lord Hopetoun, at Edinburgh, the acanthus and capital of the Nelson Column, in Trafalgar Square, with gun metal articles required for service in other departments.

2nd. The *Royal Laboratory*, in which all kinds of ammunition, ball and blank cartridges, Congreve and other rockets, grenades and fireworks, shells and spherical case-shot, or Shrapnell shells, are manufactured. Much complicated machinery is employed, among others a machine for making musket and pistol balls by compression, which acts with great ease and rapidity, and seems preferable to the old mode of casting. Percussion caps for the service are, also, made in the laboratory; the portion of the machinery designed for filling and finishing the caps is exceedingly ingenious, and performs its work with great rapidity and safety, one man and four boys being, with its assistance, able to fill and complete 150,000 caps a day. Two model rooms are attached to this department, containing specimens of every sort of ammunition used in war, and many other interesting objects.

3rd. The *Royal Carriage Department*, in which every kind of ship and land gun carriage is made and repaired; with traversing platforms, ammunition waggons, and carts. Copper-lined powder-cases are also made. The sheets of copper are timed instantly, on both sides, by a process displaying much ingenuity, the invention of one of the foremen employed here, superseding a tedious and unwholesome operation before in use, and effecting a considerable annual saving. This contains a great variety of the most efficient machinery. Among others is a scrap forge for the remanufacture of iron; a gigantic steam hammer, and two of a lesser size in the smitheries; a rolling mill, and extensive planing and saw mills.

The guns, which are arranged in the open air, comprise complete field and battering trains, mortars, howitzers, and carronades, with the guns belonging to many of the ships of war out of commission, numbering, in the whole, about 1,700 pieces of brass, and 21,000 pieces of iron ordnance, of 200 different varieties. The shot and shells, arranged in pyramidal piles, amount to nearly 2,000,000 in number. These, as well as every other description of store required for naval or military equipment, are kept in constant readiness, under the charge of the *Storekeeper's Department*. The various piles of brick buildings containing these articles, or appertaining to the departments before enumerated, are constructed on the grandest scale.

The number of artificers, labourers, and boys employed in the dockyard was set down in the navy estimates of 1866-67 at 1,793, of which number 1,105 were regular, and 688 temporary workmen. There were, besides, employed in the steam factories 733 men, including 235 boiler makers, 185 fitters and erectors, and 35 engine smiths. The total wages of the whole of the artificers and other workmen here enumerated amounted to 139,000*l.* in the year 1865.

The *Royal Military Academy*, an institution that has considerably raised the professional cha-

racter of the corps of Royal Engineers and the Royal Regiment of Artillery was founded in 1719, but was not finally arranged until 1741. The establishment, which has varied at different periods, has nearly 200 pupils, termed gentlemen cadets. It is under the direction of the master-general and board of ordnance for the time being, and has a lieutenant-governor, inspector, and other officers. For the literary department, there is a professor of mathematics, and 23 other professors and masters for mathematics, fortification, plan-drawing, surveying, chemistry, landscape-drawing, German, French, history, and geography. The academy has numbered amongst its professors several eminent men, among whom may be specified Mr. Thomas Simpson, Dr. Hutton, author of the 'Mathematical Dictionary' and other valuable works, Mr. Bonnycastle, and Dr. Olynthus Gregory. The establishment formerly cost the public 8,000*l.* or 10,000*l.* per annum, for half the number of cadets now educated; but for several years past it has been conducted upon a self-supporting principle, and with a much enlarged and a more efficient establishment. The cadets receive an annual allowance of 45*l.* 12*s.* 6*d.*, which is considered sufficient to supply every necessary article except linen. The education is excellent; the standard having been much raised of late: when the course is completed, the cadets, if found duly qualified, receive commissions in the Royal Engineers or Royal Artillery, according to their merit. The academy, formerly within the arsenal, was removed in 1806 to a fine building on the upper end of the common, about 1 m. S. from the town. This edifice, which was built by Wyatt, consists of a centre and two wings, united by corridors, with a range of building behind, containing the hall and servants' offices. The centre forms a quadrangle, with octagonal towers at the angles; and, besides a variety of other apartments, contains the four teaching rooms or academies, as they are termed. The wings contain the apartments for the cadets and chief officers. The building, which is about 200 yds. in length, is of brick, stuccoed over.

The barracks, erected for the accommodation of the Royal Artillery at different periods from 1783 to 1810, are situated on the N. brow of the common, and form a most extensive pile of building, calculated to accommodate 3,338 officers and men, and 1,200 horses. The principal front, 340 yards in length, consists of six ranges of brick building. The entrance consists of a handsome gateway, with Doric columns and military trophies. The building contains, exclusive of other apartments, a chapel, which has been recently enlarged; a spacious library and observatory, two handsome reading rooms, and the mess room. The barracks for the corps of Royal Sappers and Miners are a short distance to the NE. of the artillery barracks; they are constructed for 260 men. The parade is in front of the barracks; and the open space on the common affords sufficient room for exercising the soldiers in the throwing of shells, and ball-firing. On the E. side of the barracks, on the descent leading to the arsenal, is the ordnance hospital, an extensive edifice, calculated to accommodate about 500 patients. It has a valuable library and museum. Several detached buildings, for the use of the artillery, have also been raised on different parts of the common, among which is a veterinary hospital for the horse brigade, with stalls for 66 sick horses. A division of the Royal Marines have also barracks and an hospital at Woolwich. Perhaps the most interesting establishment at Woolwich is the repository, on the SW. side of the barrack-field, for the reception of

models of different fortified places, ships, warlike instruments and machines of all kinds, as well as trophies taken in war. The collection, which is alike extensive and valuable, is partly contained in the rotunda, a circular apartment 115 ft. in diameter, originally erected by George IV. in Carlton Gardens, for the entertainment of the allied sovereigns when on a visit to this country in 1814. Near the repository is an observatory for the use of the officers, containing a telescope and other philosophical instruments, and a museum.

The parish of Woolwich is governed, under a local act, by 30 commissioners, chosen by the parishioners, besides the rector and churchwardens. The Reform Act constituted Woolwich a portion of the par. bor. of Greenwich (which see). Petty sessions are held here by the co. magistrates on Mondays and Fridays, and a court of requests for the adjudication of claims under 5*l.* every alternate Friday. Market days, Wednesdays, Fridays, and Saturdays.

WOOTTON BASSETT, a mun. bor., market town, and par. of England, co. Wilts, hundred Kingsbridge, 83 m. W. London by Great Western railway. Area of the par. 4,380 acres. Pop. of do. 2,191 in 1861. The town, which stands on a hill, consists almost wholly of one street, about $\frac{1}{2}$ m. in length, and tolerably well built, in the centre of which is the town-hall. The parish church is an old building, in the mixed style; the living, a vicarage worth 461*l.* a year, is in the gift of the earl of Clarendon. It has, also, a chapel for Independents; a free school, founded in 1688, affording instruction to about 20 children; with charity and Sunday schools. It has no manufactures of any kind; and would hardly, indeed, be worth notice, but for the circumstance of its having returned 2 mems. to the H. of C. from the 25th of Henry VI. down to the passing of the Reform Act, by which it was disfranchised. It was reckoned too inconsiderable to be included in the provisions of the Municipal Reform Act.

WOTTON-UNDER-EDGE, a market town and par. of England, co. Gloucester, hund. Berkeley, on the declivity of a hill, as its name implies, 17 m. S. by W. Gloucester. Area of par., 4,390 acres. Pop. of do., 3,673 in 1861. The town, traversed by a small stream, on which are several cloth-mills, consists principally of two well-built parallel streets. The church, which is large and handsome, has some curious old monuments. The living, a vicarage, worth 112*l.* a year, is in the gift of the dean and chapter of Oxford. The grammar school, founded in the 8th of Richard II., and revived in the time of James I., had, at the date of the last inquiry, an income of 376*l.* 12*s.* a year; it supports ten foundation scholars, and is free to all other boys born in or inhabiting Wotton and North Nibley. The boys are instructed in writing and accounts, and are 'to use no language in the school but Latin.' The Blue-coat school, established in 1693, has an income of 94*l.* a year; the general hospital, for twelve almshouse, has a clear income of 346*l.* a year; and Perry's hospital, also for twelve persons, an income of nearly 170*l.* a year. The aggregate amount of the public endowments in the par. reached, at the period referred to above, 1,130*l.* a year. Wotton-under-Edge is a bor. by prescription, but has no extant charter; its corporation, consisting of a mayor and twelve aldermen, elected at an annual court leet, has no municipal functions, revenues, or emoluments. The inhabs. of the town and surrounding district are chiefly occupied in the weaving of woollen cloth. Petty sessions for the hund. are held in Wotton. Markets on Fridays; fairs, Sept. 25th, for cattle and cheese.

WORCESTER, an inland co. of England, having a very irregular outline and several detached portions, is bounded on the N. by the cos. of Salop and Stafford, W. by Hereford, S. by Gloucester, and E. by Warwick. Area, 462,720 acres, of which about 400,000 are supposed to be arable, meadow, and pasture. This is an extremely beautiful and well-watered co. It is traversed from N. to S. by the Severn, and in part also by its important tributaries the Avon from the E. and the Teme from the W. Surface finely diversified; the Malvern hills divide the SW. part of the co. from Herefordshire; the Bredon hills, to the S. of Pershore, have an elevation of nearly 900 ft.; and there are some considerable hills on its N. frontier between Hales-Owen and Bromsgrove. The vales of Worcester and Evesham, or rather of the Severn and Avon, are alike beautiful and fertile; but the soil in other parts, especially on the E. side of the country, is cold and poor. Besides corn, cattle, and dairy produce, Worcester produces large quantities of fine wool, apples, hops, and excellent cyder. Agriculture is by no means in an advanced state. There is no rotation as to cropping; nor are any pains taken to relieve the ground from water, though it is in many places very wet. Ploughing is badly performed, and the whole management of a slovenly description. Estates of all sizes; farms for the most part small. Coal is found in the N. parts of the co., and the brine springs of Droitwich furnish immense quantities of salt. The city of Worcester is the principal seat of the leather glove manufacture; the iron, hardware, and glass manufactures are carried on with spirit and success at Dudley; Kidderminster is famous for its carpets; and needles and fish-hooks are made to a greater extent at Redditch and Feckenham, in this co., than anywhere else in England, or, indeed, in the world. Worcestershire is divided into 5 hundreds, and 171 parishes. It sends 12 mems. to the H. of C., viz., 4 for the co., 2 each for the city of Worcester and the bor. of Evesham, and 1 each for the bors. of Kidderminster, Bewdley, Droitwich, and Dudley. Registered electors for the co., 12,096 in 1865, being 6,875 for the eastern, and 5,221 for the western division. At the census of 1861, the co. had 62,126 inhabited houses, and 294,953 inhabitants, while in 1841, Worcester had 46,919 inhab. houses, and 233,336 inhabitants.

WORCESTER, a city, parl. and mun. bor. of England, locally situated in the co. of Worcester, of which it is the cap., but forming a co. of itself; hund. Oswaldslow, on the Severn, 25 m. SW. Birmingham, 100 m. WNW. London by road, and 129 m. by Great Western railway. Pop. of city 31,227 in 1861.

Worcester is finely situated on the E. bank of the river, in a fertile and beautiful country; and is one of the best built, handsomest towns in the kingdom, having every appearance of wealth and respectability. The main streets are wide, well paved, and lighted with gas; the central street, which traverses the city from N. to S., is of considerable length, and kept particularly clean and neat. A considerable extent of ground comprised in the suburbs is unoccupied by houses, and consists principally of gardens and meadows. Of the public buildings, the principal is the cathedral, originally founded in 1084, but not completed till 1374. It stands towards the S. extremity of the town, and its appearance has been greatly improved by taking down the ancient church of St. Michael, a most ungainly edifice, which stood close to the NE. extremity of the cathedral, and greatly marred the prospect. Its exterior is plain, and

the lightness of its architecture. The central tower, though the stone is much decayed, is extremely fine. It is built in the form of a double cross; its external length, including buttresses, is 426 ft., and the internal 394 ft.; the nave, from the front to the W. transept, is 180 ft. in length; the tower, which is about 200 ft. in height, is ornamented with light and elegant pinnacles. The general character of the building is early English; there are, however, some earlier parts. A crypt, part of the nave, and the chapter-house, are Norman; parts of the nave and aisles are decorated; the cloisters, and a fine S. porch are perpendicular. The interior is very spacious, mostly in the early English style, with elegant details, and good groining. Across the SE. transept is the monumental chapel of Prince Arthur, son of Henry VII., and in the middle of the choir is the tomb of King John, the top stage of which, with the effigy, is evidently of a date soon after his decease. There are several fine ancient monuments in different parts of the church, including that of the celebrated Judge Littleton, one of the founders of the English law, a justice of the Common Pleas under Edward IV., who died in 1481. Among the more modern monuments is that of the celebrated scholar Stillingfleet, author of the *Origines Sacre*, and other valuable works, bishop of the see from 1689 till his death in 1699, with an extravagantly eulogistic inscription written by the famous Dr. Bentley. On the E. side of the cloisters is the chapter-house, the library belonging to which comprises a valuable collection of books and manuscripts, chiefly relating to theology and common law. The chapter, previously to 1836, consisted of a dean, 10 prebendaries, and 8 minor canons. The canons or prebendaries were then reduced to 8, including the dean, and their emoluments were also considerably reduced. The income of the establishment averages about 12,000*l.* a year. The bishop's palace, on the bank of the river, is an incongruous but commodious edifice, formerly surrounded with walls. It serves as the deanery; and the bishop resides at his house at Hartlebury, 10 m. distant. An ancient gateway, called Edgar's Tower, leads into the precincts of the cathedral. There are remains of several monastic establishments, including a commandery of the Hospital of St. John, in different parts of the city; and it had formerly a castle, every trace of which has been obliterated, excepting the mound on which the keep stood. Several of the parish churches deserve notice: that of St. Andrews has a square tower, 90 ft. in height, surmounted by an octagonal spire 155 ft. 6 in. in height, making the total elevation of the latter 245 ft. 6 in. The church is very ancient; but the spire is comparatively modern, having been added in 1751. All the livings in the city, except that of St. Peter, are rectories; and, except All Saints (which is in the gift of the crown), they are all in the patronage of the dean and chapter. The most valuable are St. Martin's, worth 378*l.*; St. Nicholas, worth 260*l.*; and St. Peter's, worth 233*l.* a year. Exclusive of its numerous churches, Worcester has chapels for R. Catholics, Independents, Calvinists, Wesleyans, Friends, and other dissenters. The guildhall, a large brick edifice, constructed in 1723, the front of which is ornamented with columns and statues, has a hall for the accommodation of the courts of assize, and a council chamber. The old co. jail and house of correction was defective in its plan and accommodation; but a new jail at the top of Foregate Street was built on Howard's plan, in 1824. The shire hall and courts, built 1835, in the Grecian style, is a fine edifice, as well

Friar Street, was formerly a Franciscan convent. The market-house, in the High Street, is a spacious and convenient building; and the public subscription library, in Foregate Street, contains reading and news rooms, and a considerable collection of books. Here is also a small theatre.

The royal grammar-school attached to the cathedral was founded in the reign of Henry VIII., for 40 scholars, who are prepared for the universities, and instructed besides in various subordinate departments of knowledge. It has two exhibitions to Balliol College, Oxford. The free grammar-school, founded by Queen Elizabeth, in 1561, for 12 boys, has 14 exhibitions to the universities, of 30*l.* each, and scholarships at Worcester College, Magdalen Hall, Oxford. The great Lord Somers and Butler, author of 'Hudibras,' were educated in this school. Here also are subscription schools on the Madras and Lancastrian plans, with several other schools for children of both sexes. The whole number of children at school may be estimated at about 3,000. A Diocesan Board of Education for superintending all the schools in connexion with the Church in the diocese has been established in the city. It has various almshouses, the oldest of which appears to be those of St. Oswald's hospital, founded in 1268: a city and county infirmary, erected in 1770; a lying-in institution, house of industry, female penitentiary, and dispensary. Several medical and other societies have been formed; a music festival is held every third year, the meeting in the intervening years being at Gloucester and Hereford; the proceeds are appropriated to the relief of widows and orphans of the clergy. Races take place in July and November.

Worcester had formerly a considerable manufacture of woollen goods; but this has been discontinued, and the chief business of the city consists at present in the manufacture of gloves and china ware. The number of master manufacturers in the glove trade has of late years been a good deal reduced; but the trade itself is at present in a flourishing condition, and employs a great many hands. China ware of a superior quality used to be produced here on an extensive scale; but, owing to the superior facilities for its production enjoyed by the manufacturers in the Potteries, the business declined, and is now restricted to two factories. One of these, however, is on a large scale, employing about 500 hands; and its produce, as respects beauty of design and excellence of material, is not surpassed by any in the kingdom. Here is an extensive manufactory of damask and hair seating. The other principal products are lace, spirits, tanned leather, nails, and turnery ware. There are some large iron foundries on the canal and river banks. The inland trade is carried on by means of the Worcester and Birmingham canal, and the Oxford, Worcester, and Wolverhampton railway. The canal communicates with the Severn, the banks of which have been furnished with good quays and spacious warehouses. An act, passed in 1842, placed the management of the improvement of the river in the hands of public commissioners, elected by the cities, towns, and landowners along its banks, within the distance of 42 m. from Gloucester to Stourport, which was to be improved. A continuous depth of 8 ft. water exists from the entrance of the Berkeley canal at Gloucester to Worcester; and from thence a depth of 6 ft. to Stourport, where the Severn is joined by the Stafford and Worcester canal. Ascending the river, the first weir is placed a little below the city of Worcester. The channel is left clear to that point. The improvement in the upper part of the

river has been quite successful, and vessels of 100 tons burden, drawing 6 ft. water, now navigate the Severn from Worcester to Stourport at all seasons of the year without let or hindrance. But in the lower part of the river the plan for dredging has not been equally successful. As it is, however, vessels drawing 7 ft. water have come up to Worcester. About 30,000 tons of salt are annually sent down the Severn from Droitwich. The other articles of trade are coals, iron, and china-clay, groceries, amounting in all to about 500,000 tons a year. The hop plantations of Worcestershire extend over about 1,030 acres, and most part of the produce is brought hither for sale.

Worcester was chartered in the 1st of Richard I.; but the charter was not confirmed until the 2nd of Henry III. Various other charters were afterwards granted by different sovereigns; but that by which the city was governed previously to the Reform Act dated from the 19th of James I. It erected the cities and liberties of Worcester into a co. separate from, and independent of, the co. of Worcester. Under the Municipal Reform Act, the city is governed by a mayor, 11 other aldermen, and 36 councillors. It has a commission of the peace, with jurisdiction in nearly all felonies, excepting such as affect life and limb. A sheriff's court is held once a month by the under-sheriff; a court of common pleas, and petty sessions weekly; and it is the seat of a county court. The assizes for the co. are also held here. A police force has been organised, and the peace of the town is well maintained. Worcester has returned 2 mems. to the H. of C. since the 23rd of Edward I.: the right of voting previously to the Reform Act having been vested in the freemen. Reg. electors, 2,674 in 1865. It is also the seat of election and principal polling-place for the W. div. of the co.

Worcester is of great but uncertain antiquity. It is principally celebrated in history from its giving name to the decisive victory obtained here by Cromwell over the forces of Charles II., on the 3rd of Sept., 1651. Among other eminent individuals, Worcester gave birth to the distinguished statesman, Lord Somers, born here in 1652. Markets, Wednesday and Saturday. Fairs, eleven times a year, mostly for cattle, lambs, horses, linen, hops, and cheese.

WORCESTER, a town of the U. States, in Massachusetts, cap. co. Worcester, 35 m. W. by S. Boston. Pop. 25,870 in 1860. The town is pleasantly situated in a fine agricultural district; and being at the junction of several important roads, as well as on the great railway line between Boston and Albany, it is the centre of a considerable inland trade. The principal street, upwards of 1 m. in length, is well built, and has many good private houses and hotels. The court-house, jail, several churches, a state asylum for the insane, the hall of the American Antiquarian Society, with a museum, and a library of 12,000 vols. are the chief public edifices. Worcester has numerous woollen, cotton, and paper-mills; machine factories, and printing offices. The Blackstone Canal connects the town with Providence, and other canals with Boston and the Connecticut line. The permanent settlement of the town took place in 1713, and its incorporation in 1722.

WORKINGTON, a market town, par., and seaport of England, co. Cumberland, ward Allerdale, on the Derwent, near its mouth, 7 m. N. by E. Whitehaven, on the railway from Whitehaven to Carlisle. Pop. of par. 7,834 in 1861. Area of par., 7,730 acres. The streets are mostly narrow and inconvenient; but of late years many good houses have been erected. In the upper town a new

square has been built, in which the corn market is held. It has a small neat theatre, assembly and news rooms, and various other public buildings. The Derwent is crossed here by a stone bridge of three arches. The par. church, rebuilt in 1760, has a fine altar-piece; the living is in the gift of the Curwen family, whose mansion, Workington Hall, a fine castellated structure, on a richly wooded height, overlooks the town. A chapel-of-ease, in the Tuscan style, was built in 1823; and here, also, are chapels for Independents, Methodists, Presbyterians, R. Catholics, and other dissenters. A grammar school, founded in 1664 by Sir P. Curwen, has since ceased to exist; the founder having had only a life interest in the property with which it was endowed. There are, however, Lancastrian and female schools, a dispensary, and various institutions, for the benefit of the poor, supported by subscription. Workington has manufactures of sailcloth and cordage, and a valuable salmon fishery on the Derwent, the property of the Earl of Lonsdale; but it derives its principal importance from the extensive collieries in its vicinity, which furnish considerable quantities for shipment to Ireland.

Workington harbour is protected by a break-water, and has good quays, but it nearly dries at low water. It is a creek of the port of Whitehaven. On the 1st of Jan. 1864, there belonged to the port 83 sailing vessels, of a total burthen of 21,310 tons, besides a small steamer of 17 tons. There is a fair amount of shipbuilding. Markets, Wednesday and Saturday; fairs, May 18, and Oct. 18. Races are held annually in August.

WORKSOP, a market town and par. of England, co. Nottingham, wapent. Basselaw, on the Ryton, a tributary of the Idle, 23 m. N. Nottingham, and 146 m. N. London by Great Northern railway. Pop. 7,112 in 1861. The town, consisting chiefly of one street, crossed by two others, is well built, paved, and lighted. Its church, which formerly belonged to an Augustine priory, is a fine old edifice, with two lofty towers, and has within several ancient monuments. The living, a vicarage worth \$887. a year clear, is in the gift of the duke of Norfolk. Here, also, are places of worship for various sects, a national school, and some small endowments for parochial and charitable purposes. The town is celebrated for its malt, and was formerly, also, celebrated for its liquorice, of which large quantities were raised in the adjoining district; latterly, however, its culture has been wholly abandoned. Worksop may be regarded as the cap. of the district popularly called the 'dukery,' from its containing Worksop-manoor, formerly a seat of the duke of Norfolk, Clumber Park, the seat of the duke of Newcastle, and Welbeck Abbey, the seat of the duke of Portland. These are all magnificent residences in fine parks. But the duke of Newcastle having purchased Worksop-manoor, the house, which had been rebuilt in 1763, has been pulled down. Clumber Park, now about 11 m. in circ., and finely laid out and wooded, was, so late as the era of the American war, little better than a black heath, interspersed with bogs and marshes. In this district, also, is Thoresby, the seat of earl Manvers. Markets on Wednesday.

WORMS (an. *Borbetomagus*), a city of W. Germany, grand duchy of Hesse Darmstadt, prov. Lower Hesse, cap. cant. on the W. bank of the Rhine, near the border of Rhenish Bavaria, and 26 m. SSE. Mentz, on the railway from Mentz to Mannheim. Pop. 11,308 in 1861. Worms was formerly an important free city of the empire, but is now much decayed, and is surrounded by dismantled and ruined walls. Its interior consists

of a single good street, lined with tall mansions, inhabited by persons of an inferior order, and a number of back lanes and detached buildings, many of them vacant and desolate. In a piece of open ground behind the main street stands the cathedral, a building of red sandstone, its foundation dating as far back as the beginning of the 11th century. The original part of this edifice is Gothic, but the larger portion is in the Byzantine style; the interior arches being all rounded, and the pinnacles and dome fretted in the Moorish taste. The building contains a number of excellent pieces of sculpture, and the high altar at the E. end is environed with ancient carvings in oak. The cathedral has 2 choirs, each surmounted by a cupola, one of which rises 137 ft. above the pavement. The W. choir is a good specimen of the architecture of the 12th century, and has a magnificent rose-window of that period. The Lutheran church, in the market-place, in which is a painting of Luther before the Diet of Worms, in 1521, occupies the site of the council-hall, in which that event took place. This hall was destroyed when the city was bombarded by the French, in 1689; at which time, also, a vast number of houses were destroyed. From this period, in fact, the decay of Worms may be dated; many of the inhabs. having afterwards settled in other German towns, and in Holland. Some of the other churches deserve notice; and there are 2 synagogues. Charlemagne was married at Worms; and it was frequently inhabited, both before and after his time, by the Frankish sovereigns; but no remains of the imperial palace exist, except a few fragments of a wall, forming part of the *Bürgerhop*, a prison, and police-office. Worms is the seat of a consistory, about half its inhabs. being Protestants; and it has several convents and hospitals, a gymnasium, and elementary schools, supported by different religious sects. It has manufactures of tobacco, sealing-wax, and hats, but its principal trade is in wine, and other agricultural produce. The vicinity of Worms, celebrated by the ancient Minnesingers as the *Wonnegau*, or 'land of joy,' is in great measure covered with vineyards, producing some of the best growths of the Rhine. The famous *Liebfrauenmilch* is grown around the church of Notre Dame, close to the city.

Worms is supposed to owe its origin to a fort erected here by D. usus: many Roman antiquities have been discovered in and near it. Among the councils held at Worms, that in 1122 was the most famous. Diets were, also, held here in 1492, 1517, and 1521. The latter is famous from the fact of Luther having, as already stated, appeared before it to explain and answer for his opinions. On appearing before the Diet, he displayed equal firmness and moderation. An edict was, however, issued against him on the 26th of April, by which he was excommunicated as an obstinate heretic. But previously to this, in consequence of the determination of the emperor and the other princes who had given him a safe conduct, not to forfeit their word, he was allowed to withdraw from the city in safety.

WORTHING, a maritime town and fashionable watering-place of England, on the English Channel, co. Sussex, rape Bramber, hund. Brightford, in the par. of Broadwater, a village about a mile to the N., 49 m. S. by W. London, and 10 m. W. Brighton, on the London, Brighton, and South Coast railway. Pop. 5,805 in 1861. In the middle of last century, Worthing was only an inconsiderable fishing village, and is indebted for its increase and celebrity to the visits of the royal family during the latter part of last cen-

Wrexham. The buildings of the town extend along the coast for about $\frac{3}{4}$ m., and the main street runs for somewhat more than $\frac{1}{2}$ m. in a N. direction. Excepting in its centre, the houses are mostly arranged in regular terraces, though many are isolated and interspersed with fields and gardens. The ranges of building fronting the sea are generally faced with cream-coloured bricks made from a peculiar clay found in the vicinity, and the town is well paved, lighted, and has an ample supply of water. The church, erected in 1812, at a cost of 12,000*l.*, is a very neat edifice, with a Doric portico. The living, a curacy worth 150*l.* a year, is in the gift of the rector of Broadwater. Here, also, are chapels for Independents and Wesleyans, to which Sunday schools are attached; with well attended national schools, for both sexes, supported by subscription; a savings' bank, and a small, but elegant theatre, opened in 1807. The market-place consists of ranges of covered stalls built around a square area. The esplanade, a raised causeway, extends along the shore for the whole length of the town: near its W. extremity are the royal baths, comprising two complete suits of apartments. The new Parisian baths adjoin the Sea House Hotel. The town has numerous hotels, with assembly-rooms; libraries, reading and news-rooms, convenient bathing-machines; and the other accommodations incident to a well-attended watering-place. Fine sands extend along the coast for 7 m. to the W., and 3 m. to the E. of the town. These, with the gradual increasing depth of the water, which gives the opportunity of bathing at any time of the tide, added to the mildness of the climate, in consequence of the shelter afforded on the N. and E. by the South Downs, render Worthing especially suitable as a place of resort for invalids. No manufacture of any kind is carried on; but the mackerel and herring fisheries are usually very productive, and contribute largely to the supply of the London markets. An annual fair is held on July 20; market-day, Saturday and every alternate Wednesday for corn.

WREXHAM, a parl. bor., market-town, and par. of Wales, co. Denbigh, hund. Bromfield, on the railway between Shrewsbury and Chester, 11 m. S. by W. the latter. Pop. of bor. 7,562, and of par. 19,780 in 1861. The par. of Wrexham includes no fewer than 12 townships, 2 only of which and a small detached portion of a third are included in the parl. bor., which has an area of 1,145 acres. Wrexham is a handsome town, with spacious streets crossing each other at right angles, and neatly and substantially built houses; it is also well paved, lighted with gas, and plentifully supplied with water. The church, dedicated to St. Giles, a large and venerable structure, is regarded as one of the principal ecclesiastical edifices in the principality. It was erected about 1472 on the site of a more ancient structure: it is in the perpendicular style, and is covered with grotesque sculpture; but in correctness of design and proportion it is surpassed by few buildings of the same date. It consists of a nave, with side aisles and a chancel, the whole length being 178 ft., and the breadth 72 ft.; the aisles are separated from the nave by clustered columns supporting pointed arches; and the ceiling is of oak, in imitation of groined stone. The tower, which was not completed till about 1506, is 135 ft. in height: it consists of several successive stages panelled throughout, and decorated with numerous statues of saints placed in niches of the buttresses, which latter are surmounted by 4 light open-work turrets rising 24 ft. above the balustrade that surrounds the summit of the

tower. It has a fine altar piece, and some interesting monuments; among which are two to members of the Middleton family, admirably sculptured by Roubilliac. The living, a valuable rectory, worth 746*l.* a year, is in the gift of the bishop of St. Asaph. It has, also, a Roman Catholic chapel, and four places of worship for Protestant dissenters; a house of correction for the county, with 7 wards; a free endowed grammar school, 2 parochial national schools; a public library; reading, news, and lecture-rooms; agricultural and horticultural societies; a neat theatre; and a property yielding 230*l.* a year, for distribution among the poor and other charitable purposes. The town-hall, at the head of High Street, has a large room used for public meetings. Annual races take place in October. The town is under the jurisdiction of the co. magistrates, who here hold monthly petty sessions for the hunds. of Bromfield and Gale.

The Reform Act conferred on Wrexham the privilege of voting in the return of a mem. to the H. of C. along with the bors. of Denbigh, Holt, and Ruthin. Registered electors for Wrexham and the other bors. 889 in 1865. It is one of the polling places for the co. No particular branch of trade or manufacture is now carried on here, though Leland describes it, some centuries since, as containing 'sum merchautes and good brokeler (buckler) makers.' It owes its present degree of activity principally to its situation on the main road from North Wales through Chester to Liverpool. Coal, iron, and lead mines are extensively wrought in the parish, which has also some large iron works. Exclusive of several of minor importance, a large fair, which continues for 14 days from the 23rd of March, and is attended by traders from a great way round, is held here annually, for the sale of horses, cattle, Manchester, Birmingham, and Sheffield goods, Irish linens, Welsh flannels, Yorkshire and other woollen cloths.

WÜRTEMBERG (KINGDOM OF) one of the secondary states of the German Confederation, in the S. part of which it is situated, between lat. 47° 5' and 49° 35' N., and long. 8° 15' and 10° 30' E., having N., W., and SW. the territory of Baden; E. and SE., Bavaria; and S., the Lake of Constance, and the former Hohenzollern principalities, which it nearly encloses. The kingdom is divided into 4 Kreise, or circles, of the following area and population, according to the census of December 3, 1858, and December 3, 1861:—

| CIRCLES. | Area in Eng. Sq. M. | Population | |
|------------------|---------------------|------------|-----------|
| | | 1858 | 1861 |
| Neckar . . . | 1,306 | 486,700 | 497,375 |
| Black Forest . . | 1,861 | 425,390 | 431,676 |
| Danube . . . | 2,549 | 369,006 | 376,753 |
| Jact . . . | 2,124 | 409,802 | 414,904 |
| Total . . . | 7,840 | 1,690,898 | 1,720,708 |

The increase in population is very slow: little more than $1\frac{1}{2}$ per cent. during the three years from 1858 to 1861.

Physical Geography.—The surface is in great part mountainous, being covered by ranges of the Black Forest (*Schwarzwald*), Suabian, and Raube mountains. The Oberhohenberg, near Deilingen, rises to about 3,278, and the Kniebis to 3,100 feet, above the sea; but, in general, the various ranges are less than 3,000 feet in height. Würtemberg belongs partly to the basin of the Danube, and partly to that of the Rhine; besides which the principal rivers are the Neckar, with its tributaries, and the Iller, a tributary of the Danube. Except

that of Constance, it has no lake of any importance.

The climate is mild in the sheltered valleys: at Stuttgart the mean temperature of the year is about 51° Fahr. The quantity of rain that falls varies, in different places, from 20 to 46 inches a year; but at Stuttgart is about 23·9 inches. As respects its productions, the country may be divided into 3 zones: the region of the vine, which extends to about 1,000 feet above the sea; that of fruit and corn, to 2,000 feet; and that of corn and forests, comprising all above the latter elevation.

Agriculture is the principal occupation of the mass of the pop. The arable lands have been estimated to comprise about 2,440,000 morgen; vineyards, 84,778 do.; gardens and orchards, 150,650 do.; pasture lands, 738,000 do.; and forests nearly 2,000,000 do. Spelt, oats, barley, rye, and wheat are the grains principally cultivated; and a larger quantity of corn is usually produced than is required for home consumption. Potatoes are raised in large quantities; and the annual crop is estimated at 8,000,000 scheffels. Pease, beans, turnips, hops, and tobacco, are only partially cultivated. The wines grown on the Neckar are tolerably good; and altogether Württemberg produces annually about 155,000 cimers of wine, of the estimated value of 3,100,000 fl.; but a great deal of this is grown at a considerable elevation on the banks of the Lake of Constance, and elsewhere, and is of a thin and indifferent quality. Apples, pears, apricots, and other fruits of temperate climates, including even figs and melons, come to perfection, and small quantities of cider and perry are made. The forests are an important source of wealth. Pine, fir, and cedar are the principal kinds of trees; but oaks and beeches are also numerous. The timber cut in the Black Forest is estimated to produce upwards of 400,000 fl. a year. There are upwards of 800,000 head of cattle, 93,000 horses, 586,000 sheep, and 122,000 hogs in the kingdom; and the value of the wool produced annually may be about 1,713,000 fl. There are numerous associations for improving the different branches of rural industry; and government spends considerable sums in the encouragement of agriculture.

Salt is one of the principal mineral products, and between 400,000 and 500,000 centners a year are obtained from salt springs; of which quantity, about 280,000 centners are consumed in the country, the rest being exported, principally to Switzerland. Coal and lignite are found, but in no great quantities; iron ore, slate, building and mill stone, alabaster, gypsum, nitre, and potters' clay are, however, more or less abundant; and in the Black Forest are several mineral springs frequented by visitors.

Manufactures of linen and linsey-woolsey fabrics, hosiery, and woollen cloths are carried on in most of the peasants' houses; and in some places to such an extent, that, in the little village of Laisingen, there are 400 hand-loom, which annually produce 400,000 ells of linen. The manufacture of wooden clocks and toys, exported to all parts of Europe and America, is extensively carried on in the Black Forest and other parts. Cotton yarn is spun, and cotton cloth woven by machinery, in Stuttgart and Obendorf; and woollen yarn, stockings, leather, paper, glass, and tobacco, and tobacco-pipes are manufactured in the principal towns: and there are also a good many dyeing-houses, glue factories, breweries, and distilleries. The principal exports consist, however, of cattle, wool, corn, timber, fruit, wine, seeds, hemp, iron, salt, pitch, tar, oil, and other raw products, which

are sent down the Neckar, Rhine, and Danube. The total value of the exports and imports may be estimated at from 15,000,000 to 18,000,000 fl. a year. Württemberg, at one period, proposed with Bavaria to join Austria in a commercial union, for the S. of Germany, in opposition to that established by Prussia in the N.; but the proposal being rejected, Württemberg, like Bavaria and Baden, became a member of the Zollverein, or Commercial League.

Accounts are kept in gulden or florins, worth about 1s. 8½d., divided into 15 batzen, or 60 kreutzers, of 6 hellers each. The ell, about 2 ft. English; the morgen = nearly 2·3rds acre; the scheffel = 7,538 cub. in.

The *Government* is an hereditary monarchy, limited by the constitution of 1819. The parliament consists of 2 chambers, called together every 3 years, or oftener, if necessary. The first chamber is composed of the subordinate members of the royal family, the mediatised princes, and the heads of the principal noble families; the second chamber, or House of Representatives, consists of 94 mems., including 13 of the inferior nobility, 6 Protestant-superintendents, the Rom. Cath. bishop, and other dignitaries, the university-chancellor, deputies from the towns of Stuttgart, Tübingen, Ludwigsburg, Ellwangen, Ulm, Heilbronn, and Reutlingen; and a representative from each rural district, chosen every 6 years. Members of the second chamber must be 30 years of age. The administration is conducted by 5 ministers of state, who, with a president, form the privy council. The supreme judicial court in Stuttgart is divided into civil, criminal, educational, and matrimonial tribunals; and in each of the circles, districts, and communes there are courts of justice. The reigning house, which had been previously Protestant, became Rom. Cath. in 1772, without, however, the change having any material influence over the religious persuasion of the people. The last census of Württemberg, of Dec. 3, 1861, states the religious creed of the inhabitants as follows:—Evangelical Protestants, 1,179,814; Roman Catholics, 527,057; Dissenters of various denominations, 2,499; and Jews, 11,388. The 'Evangelical Protestant' Church of Württemberg was formed in 1823, by a union of the Lutherans and the Calvinists, or Reformers. The administration of the Protestant Church is in the hands of six general superintendents, at Ulm, Ludwigsburg, Reutlingen, Hall, Heilbronn, and Tübingen. In respect to education, Württemberg ranks very high. Every individual in the kingdom is able to read and write, except a few in that part of the country called the Suabian Terrace, where the Neckar rises. It has a university (at Tübingen), a lyceum, and gymnasiums, in all the principal towns, with ecclesiastical, citizens', and other schools; and a primary school in every village.

The total armed force consists of 19,500 men, including 3 regiments of infantry, 4 of cavalry, and 3 companies of artillery, with train. The army is formed by conscription, to which all healthy men who have passed the age of twenty-one are liable. Substitution is allowed. The number of recruits to be raised is determined every three years by a special law passed by the Chambers. For the period 1861-4 it amounted to 4,600 men annually. The period of service is six years; but, as a rule, the men are sent home on furlough, in the infantry, at the end of eighteen months, and in the cavalry, at the end of two years, and they are liable only to be called upon afterwards for occasional military practice. At the end of six years the active army has no more claim upon the soldier; but his name is entered

next upon the register of the landwehr, or militia, for the defence of the country.

The total revenue of the kingdom in the year 1862 amounted to 1,267,808*l.*, and the expenditure, in the same period, to 1,268,649*l.* The public debt of Würtemberg has more than doubled within the last twenty years, owing chiefly to the establishment of the railway lines of the kingdom, the whole of which, without exception, are state property. According to an official return, published June 30, 1860, there had been expended at that period, both for railways and steamers, a sum of 42,824,956 florins, or 3,568,746*l.* As the capital was borrowed at from 3½ to 4½ per cent., and the net income of the railways, all expenses deducted, and making allowance for wear and tear, amounted to between six and seven per cent., the investment so made contributed considerably towards lightening the burthens of the tax-payers. The length of lines given to the traffic amounted, on October 15, 1861, to 266 English miles; but this did not complete the whole network of railways, which is expected to be finished by the end of 1867.

History.—Würtemberg derives its name from a castle near Stuttgart, the principal seat of the reigning family. It was formerly a dukedom. The French overran the country in 1796; but the sovereign having made his peace with the conquerors, important additions were made to his territories in 1800; and soon after the battle of Austerlitz, Napoleon raised the duke to the rank of king. Under the congress of Vienna, Würtemberg holds the sixth rank in the German Confederation, with 4 votes in the full diet and 1 in committee; and contributes 23,259 men to the confederated army.

WURZBURG, a city of Bavaria, circ. Lower Franconia, of which it is the cap., on the Mayne, by which it is divided into two parts, 62 m. SE. by E. Frankfort, on the railway from Frankfort to Nuremberg. Pop. 88,120 in 1861. Würzburg is finely situated, in a hollow surrounded by vine-covered hills, and traversed by the Mayne, here a large and fine stream, covered with boats and barges. The greater part of the city is on the right or N. bank of the river, the communication with the citadel, and a suburb on the opposite bank, being kept up by means of a handsome bridge. Würzburg is enclosed by walls, and, being one of the oldest towns of Germany, is irregularly laid out, its streets being generally narrow and angular: it has, however, some venerable edifices. The cathedral was originally founded in the 8th century, but the earliest portions of the present building appear to date from the 11th or 12th. The interior has been modernised with little taste, but it has some monuments worth notice, including those of a long series of the prince-bishops of Würzburg, the sovereigns of the city and adjacent territory, for upwards of 1,000 years. There are 32 other churches, the finest of which is the Marienkirche, in the pointed Gothic style. The royal, formerly the episcopal residence, in a small square, was erected early in the last century; it is of an oblong form, on the plan of the palace at Versailles, and is of great extent, including, besides a magnificent staircase, upwards of 280 apartments, mostly fitted up in the style of Louis XIV. The gardens attached to it form a favourite promenade. The great hospital is an extensive and well conducted establishment, partly subsidiary to the school of medicine, for which the university of Würzburg is famous. This university was founded in 1403, and revived in 1582: at different periods it has been in a very flourishing state. It has some good scientific collections, and a library of

120,000 volumes. In 1882 it had 521 students, of whom 244 attended the medical classes, 109 the law, 118 the divinity, and 50 the philosophical; but the number has since declined, and does not at present amount to 400. It has also a gymnasium, a teachers' seminary, musical and polytechnic institutions, a society of arts and sciences, and an infirmary for the cure of deformities. Only three or four of the numerous monastic institutions formerly established in the city now exist. Würzburg is the seat of the court of appeal for the circle, and a bishop's see. Its manufactures consist principally of woollen stuffs, hats, leather, sealing-wax, and surgical instruments. It is the principal dépôt for Franconian wines, which are mostly sent down the Mayne to Frankfort.

Würzburg was secularised and given to the Archduke Ferdinand of Austria in 1803, and was ceded to Bavaria in 1815.

WYCOMBE (CHIPPING, or HIGH), a parl. and mun. bor., market town, and par. of England, co. Buckingham, hund. Desborough, on the Wick, a small tributary of the Thames, and on the high road from London to Oxford, 27 m. WNW. the former by road, and 34 by Great Western railway. Pop. of munic. bor. 4,221, and of parl. bor. 8,373 in 1861. The old parl. and mun. bor., which were co-extensive, did not include the whole of the town; but the modern mun. bor. is rather more than three times the size of the former, and the modern parl. bor. is identical with the par. The latter has an area of 6,380 acres. Wycombe extends for 1½ m. along the valley in which it is situated, and though it has increased but little of late years, its general appearance is that of a well-built, prosperous market town. The principal roads communicating with the country to the NW. and SE., diverge from the market-place in the centre of the High Street. The church, a large and venerable structure in the perpendicular and early-decorated styles, has a tower at its W. end, 108 ft. in height, erected in 1522; but the rest of the church dates chiefly from the latter part of the 13th century. The interior has a fine altar-piece, and several monuments, among which is one by Scheemakers, to the Earl of Shelburne, father of the first Marquis of Lansdowne, who died in 1761, and another by Carlini to a countess of Shelburne. The living, a vicarage worth 140*l.* a year, is in the gift of the Marquis of Lansdowne. The Independents, Baptists, and Friends have places of worship here. The town-hall, erected in 1775, is a large and respectable brick building, supported on stone pillars. The free grammar-school, founded by Queen Elizabeth, has attached to it some almshouses, and an income of about 390*l.* a year. Here also is a girls' Lancastrian school, with numerous bequests for the general relief of the poor. The manufacture of chairs is the only one of any importance carried on in the town. Some years since a considerable quantity of pillow lace was produced here; but this branch of industry has been nearly superseded by the machine-made lace of Nottingham and other places. There are several considerable paper-mills near the town, on the Wick, and others in different parts of the parish. But the prosperity of High Wycombe is mainly owing to its being the market town for a district of 10 m. round. It has an extensive corn market.

The earliest extant charter dates from 1586. Under the Mun. Reform Act it is governed by 4 aldermen and 12 councillors. The bor. has returned 2 mems. to the H. of C. since the 28th of Edward I. Previously to the Reform Act the right of election was vested in the mayor, aldermen, bailiffs, and burgesses, of whom there were usually about 180. As already seen, the limits of

the modern par. bor. have been considerably enlarged. Registered electors, 494 in 1865. Waller, the poet, was mem. for this bor. in 1625. A little SW. from the town is Wycombe Abbey, the seat of Lord Carrington, by whose ancestors it was purchased from the Lanedowne family. Market day, Friday; fair, Monday before Michaelmas.

WYMONDHAM, or WYNDHAM, a market town and par. of England, co. Norfolk, hund. Forchoc, on a hill, 9 m. SW. by W. Norwich, and 116 m. NE. London by Great Eastern railway. Pop. of town 2,152, and of par. 4,952 in 1861. Area of par. 11,240 acres. The town, on the high road from London to Norwich, has a market-place with an ancient cross. The church, a venerable structure, in a mixed style, consists of a nave with aisles, a large W. tower, and another at the intersection of the nave with the transepts. Originally it formed a part of a monastery founded in the time of Henry I., to which the town appears to have owed its earliest importance. Within are many curious monuments, including that of the founder, William de Albini, and a large carved font. The living, a vicarage worth 515*l.* a year, is in the gift of the bishop of Ely. Here also are chapels for Independents, Wesleyans, Baptists, Friends, and other dissenters. The grammar school, founded by Edward VI., has a total income

of about 180*l.* a year. It is governed by 12 trustees and 15 governors, and is free to all boys of the par.; but, in consequence of a pending chancery suit, it had no pupils at the date of last inquiry. It has two exhibitions at Cambridge, and a share of an exhibition for scholarships. A national school affords instruction to about 100 boys and 70 girls: 200 children attend a Sunday school attached to the church, and about the same number frequent one attached to a dissenting chapel. It is estimated that about one-sixth part of the pop. is supported by weaving, principally bombazines, crapes, and other Norwich goods. The average wages of weavers amount to only about 7*s.* a week. A court leet is held annually, and a manorial court occasionally. A little to the N. of this town is Kimberley Hall, the seat of Lord Wodehouse, in an extensive and finely-wooded park. The Wyndham family, one of the most illustrious in the co. of Norfolk, which derived its name from this town, has produced, among other eminent individuals, the distinguished parliamentary leaders, Sir William Wyndham of the reigns of George I. and II., and Mr. Wyndham, of that of George III. Markets at Wymondham, on Fridays; fairs for cattle, Feb. 12th, May 16, and Sept. 29th.

X.

XALAPA, or **JALAPA**, a town of Mexico, prov. Vera Cruz, on the railway from Vera Cruz to Mexico, 55 m. NW. the former. Pop. estimated at 13,000. The town stands on a platform, about 4,300 ft. above the level of the sea, surrounded by fine mountain scenery, and sometimes subject to heavy fogs. Its climate is generally mild and salubrious, though it is neither so clean nor so well built as Vera Cruz; but it has numerous houses of 2 stories, built after the old Spanish manner, in a square, enclosing a court planted with trees and flowers, with a fountain in the centre. The cathedral and other churches, though in an indifferent style of architecture, are very gorgeous. This was formerly a great entrepôt for the European trade with Mexico, and large fairs were held here; but its trade has greatly diminished, and its shops and warehouses do not now make much show. The more wealthy inhabs. of Vera Cruz, and, indeed, of all the adjacent coast district, or *tierras calientes*, resort to Xalapa in the summer to avoid the heat, insects, and fevers of the low country, from all which it is free.

The well known medicinal herb *jalap*, grows abundantly in the vicinity of this town, to which it is indebted for its name.

XERES DE BADAJOS, or **DE LOS CABALLEROS**, a town of Spain, in Estremadura, prov. Badajoz, near the Ardilla, a tributary of the Guadiana, 40 m. S. Badajoz. Pop. 8,295 in 1857. The town is walled, and, like most Spanish towns, had numerous monastic institutions; but from its being out of any great route, it is rarely visited by travellers. It has manufactures of linen fabrics, leather, hats, soap, and a large trade in cattle, which are extensively reared in its neighbourhood.

XERES DE LA FRONTERA, a city of Spain, in Andalusia, prov. Cadiz, on the road from Cadiz to Seville, near the Gaudalete, 17 m. NNE. Cadiz, on the railway from Cadiz to Seville. Pop. 38,898 in 1857. Xeres is situated in the lap of two rounded hillocks, which shelter it to the E. and

W.; and it covers a considerable extent of ground. The city, properly so called, is embraced by an old crenated Moorish wall, enclosing a labyrinth of narrow, ill-built and worse drained streets; but this wall is of no great circuit, and is so intermixed with the houses of the suburbs as to be visible only here and there. The limits of the ancient town are, however, well defined by the numerous gateways still standing. Some of the old buildings and narrow streets are striking in appearance, and the number of gables and chimneys cannot fail to strike one who has been long accustomed to the flat-roofed cities of Andalusia. The city has eight par. churches, among which is one that is collegiate, with a library and a collection of coins; a town-hall, numerous convents; a foundling, an orphan, and other hospitals; several schools, a college, a public granary, infantry barracks, and an old fortress, are the principal public edifices. The streets, even in the best parts of the city, are filthy; and the want of cleanliness is the main source of the destructive epidemics with which the town is frequently visited.

Xeres derives its principal importance from its being the great emporium of the well-known wine, called sherry, grown in its vicinity. The principal wine merchants reside mostly in the suburbs, where are, also, the largest warehouses. These are all above ground, and are immense buildings, with lofty roofs supported on arches, springing from rows of slender columns, having their walls pierced with numerous windows to admit of the thorough circulation of air. The vineyards, mostly situated on slopes, are scattered at considerable distances; they may extend over 12,000 acres. It is not easy to form any very accurate estimate of the produce of the sherry vineyards, partly because there is no accurate account of the exports and of the stocks on hand, and partly because a considerable quantity of the light wine, called *moquer*, grown on the right bank of the Guadalquivir, is mixed up with the

inferior sherries. Probably, however, the average annual export of sherries may amount to about 20,000 butts (the butt contains about 105 wine gallons), worth from 12*l.* to 65*l.* a butt. The finer sherries are all made from the Xeres grape, with the addition of only about 2 bottles of brandy to a butt, and sometimes of a little Paxarete, or sweet sherry, and of Amontillado. The wines are mostly all kept in very large casks, approaching in some degree to the Heidelberg tun, and when any wine is drawn off from one of these *madre* butts, it is replaced by an equal quantity taken from the next oldest butt, so that it is idle to talk of the sherry found in the market belonging to any particular vintage. The dark or deep brown sherries are occasionally produced by boiling a quantity of pale sherry to one-fifth part its bulk, and mixing up this residuum with paler sherries, in quantities proportioned to the shade required. Amontillado, made in imitation of the wine of Montilla, near Cordova, the driest of sherries, is made from a variety of grapes plucked before they are quite ripe. It is the purest of the sherries, and will bear no admixture of either brandy or boiled wine.

England is and has long been the principal market for sherries. They used originally to be

introduced and sold under the name of sack; but it is only of late years, and especially since the decline in the taste for Madeira, that they have come into all but universal use among all classes as a dinner wine. It is not easy, indeed, to account for their extraordinary popularity; for, though sherry of good quality, and kept to a proper age, is a very superior wine, the finer varieties bear no proportion to those that are inferior; and it is, besides, too powerful to be used with any degree of freedom.

Of late years Port St. Mary, on the N. side of the Bay of Cadiz, 10 m. SW. Xeres, has absorbed a considerable part of the trade of the latter, the wine-merchants who have settled there having the additional advantage of being able to superintend the shipping of their wines. Xeres has a few manufactures of serges, leather, and soap, but only for the consumption of its own inhabs. On the plain outside its walls was fought, A. D. 714, the battle which finally overturned the Vizigothic monarchy of Spain, and gave a great part of that country to the Moors. On the Guadalete, near the scene of this battle, is a Carthusian monastery, founded in 1571, once the most celebrated in Spain, but now in decay.

Y.

YAKUTSK, a town of E. Siberia, cap. of the immense prov. of its own name, on the Lena, about 1,150 m. NE. Irkutsk, lat. 62° 1' 50" N., long. 147° 44' E. Pop. about 4,000. According to Wrangell ('Siberia and the Polar Sea'), 'Yakutsk has all the character of the cold and gloomy north. It is situated on a barren flat, near the river. The streets are wide, but the houses and cottages are poor in appearance, and are surrounded by tall wooden fences. Here are five churches, a convent, a stone building for commercial purposes, and an old wooden fortress with its ruined tower, built in 1647, by the Cossack conquerors of Siberia. The town has, however, undergone great improvements in the last thirty years. The Yakut huts have been replaced by substantial houses; the windows of ice or talc have given way to glass in the better class of houses, and the more wealthy inhabitants begin to have higher rooms, larger windows, double doors. Yakutsk is the centre of the interior trade of E. Siberia. All the most costly furs, as well as the more common kinds, walrus teeth, and fossil remains, are brought here for sale or barter, during the ten weeks of summer, from Anabor and Behring's Straits, the coasts of the Polar Sea, and even from Okhotsk and Kamtschatka. It is not easy to imagine the mountain-like piles of furs of all kinds seen here; their value often exceeds 2,500,000 roubles. Almost all the Russian settlers in Yakutsk employ their capital in purchasing furs from the Yakuti during the winter; on which they realise a good profit at the time of the fair, when they sell them to the Irkutsk merchants. As soon as the Lena is clear of ice, the merchants begin to arrive from Irkutsk, bringing with them for barter, corn, meal, the pungent Circassian tobacco, tea, sugar, brandy, rum, Chinese cotton, and silk stuffs, yarn, cloth of inferior quality, hardware, glass. But at the annual fair there is not the appearance of animation and bustle which might naturally be expected. The goods are not exposed for sale, and most of the purchases are effected in the houses or enclosures of the citizens.

The variations of climate are extraordinary; for though, on the whole, cold predominates to a very great extent, the thermometer in winter often falling to 40° R. or 56° below the zero of Fah., the heat in summer is sometimes not inferior to that of the torrid zone.

The vast province of Yakutsk comprises, at least, three-fifths of E. Siberia, and is watered by the great rivers Lena, Yana, Indigirka, and Kolyma, which supply vast quantities of fish. Iron, salt, and excellent talc are the chief mineral products: game, of many kinds, abounds. Large herds of cattle are reared near Yakutsk, and notwithstanding the severity of the winters, rye, barley, and even wheat, are said to succeed well throughout the province, except in those parts which are so far N. as to render the summer too short for ripening grain.

YANINA, improperly JOANNINA (probably the an. *Euraca*), a city of European Turkey, prov. Albania, of which it is the cap.; on the W. bank of the lake of its own name, 80 m. W. by N. Larissa. Lat. 39° 47' N., long. 21° 1' E. Pop. estim. at about 12,000. The city occupies a small peninsula, extending into the lake, and a part of the adjacent shore, its site being tolerably level. Less than 50 years ago Yanina was a town of 30,000 inhabs., with numerous mosques, many large and well-built houses, and several palaces. It had then a considerable trade with the rest of Epirus, Roumelia, Wallachia; and a large annual fair, to which a good deal of Italian produce, with French and German manufactures, were brought. It was, however, set on fire by order of Ali Pacha, in 1820, and was almost wholly ruined. The streets are narrow and crooked, and the houses are now mostly of mud. Numerous vacant spaces, especially about the citadel, are covered with ruins, and all its animation is confined to the bazaar.

The lake of Yanina is about 6 m. in length, and nearly 3 in its greatest breadth: it is narrowest at the N., and gradually expands towards the S. The scenery around it would be fine if its banks

were wooded; but, as it is, the lake is far inferior in respect of beauty to those of Italy or Switzerland, and is excelled by some of the Scottish lakes. An island opposite the peninsula has a church and monastery. The description given by modern travellers of the site of Yanina and its lake, answers perfectly to that of the city and lake of Euræa by Procopius. Justinian built a fortress at Euræa, apparently on the identical site now occupied by the citadel of Yanina.

YARKUND, the chief city of Chinese Turkestan, in a fertile plain, on the river of its own name; lat. $38^{\circ} 19' N.$, long. $76^{\circ} 17' 45'' E.$ Its pop. has been variously estimated, but may probably amount to 50,000, exclusive of the Chinese garrison. It is enclosed by an earth rampart, pierced with five gateways, outside which are extensive suburbs: there are two citadels, one in the suburbs, and the other in the town. The houses, built of stone and clay, are mostly only one story in height; the streets are intersected by numerous canals and aqueducts, which bring water from the river for the use of the inhabs. Yarkund has two large bazaars, numerous mosques, and 10 or 12 Mohammedan colleges, most of the native inhabs. being Mussulmen, though much more lax in their religious prejudices than their neighbours to the W. About 200 Chinese merchants reside in the place, and some Cashmerians and Persians, but only a few Hindoos, and neither Jews nor Nogai Tartars. When Marco Polo visited this city, he found some Nestorian Christians among the inhabs. 'The productions of China,' says Sir A. Burnes (Bokhara, iii. 193), 'are transmitted to this prov., and sold to the natives of Bokhara and Thibet, who are permitted to frequent certain fixed markets. No Chinese crosses the frontiers, the trade to Bokhara being carried on by Mohammedans, who visit Yarkund for that purpose. The same vigilance to prevent the ingress of foreigners is here exhibited as upon the sea-coast.' Horses are a great article of trade.

Yarkund, with the adjacent prov. of Cashgar, formed the principality of a Mohammedan khojir. Dissensions arose in the reigning family in the time of Kien-long, and they called on the Chinese government as a mediator, which, as frequently happens, acted the part of a conqueror. The period which has elapsed since the capture of Yarkund has in no way diminished the precautions of the Chinese government. Yarkund is still considered but an outpost. The Mohammedan natives fill the subordinate offices of state, but under the strict superintendence of the Chinese authorities. The garrisons, consisting of from 5,000 to 7,000 soldiers, are recruited from boys of 14 and 15 years old, who are sent back, after about as long a period of service. According to some Chinese documents, the annual tribute of the Yarkund people to the Chinese comprises 30 oz. of gold, 35,000 do. of silver, 30,000 sacks of corn, 80 lb. oil, 57,000 pieces of linen, 15,000 lbs. cotton, and 3,000 lbs. copper.

YARMOUTH, a parl. and munic. bor. and seaport of England, partly and principally in the co. Norfolk, but partly, also, in that of Suffolk, on the Yare, at its mouth, in the North Sea; 19 m. E. by S. Norwich, 108 m. N.E. London by road, and 121 m. by Great Eastern railway. Pop. of bor. 34,810 in 1861. The old parl. bor., which included the hamlet of South-town, in Suffolk, in the par. of Gorleston, on the S. side of the river, had an area of 2,110 acres, but the modern parl. bor. includes the whole par. of Gorleston, comprising the village of that name, and has an area of 3,940 acres. The part of the town on the E. side of the Yare, or Yarmouth properly so called, occu-

pies a narrow peninsula, between the sea on the one hand and the river on the other. It consists of four principal lines of streets running nearly parallel with the river, and of an immense number of narrow lanes, or rows, that form the lateral communications between these streets. Very few of the rows exceed from 5 to 8 ft., and only two of them at the opposite ends of the town were passable for common wheel carriages, until the widening of some others in the centre of the town, not long since, formed the street called Regent Street. The principal streets are well built and wide, opening in some places into a spacious quay, market-place, and squares; and the town presents, on the whole, a thriving appearance. The best dwelling-houses are situated along the quay: many of these are substantial and handsome, as are, also, many of those in the other principal streets. Most of the shops are situated in the market-place, King Street, Broad Row, and Market Row; and the warehouses, granaries, malt-houses, and fish-offices, together with the inferior dwelling-houses, are in the different rows. On the N., E., and S., the town is enclosed by old walls, beyond which is an intermixture of every description of buildings; but principally of extensive warehousing premises, and residences of an inferior class. A considerable extension beyond the old walls has taken place on the E. side: and long lines of streets, besides many detached dwellings and extensive fish-offices, and other premises connected with the trade of the place, now occupy a great part of the space between the town and the seashore, particularly towards the new jetty.

Yarmouth is connected by a bridge over the Yare with South-town, or Little Yarmouth. This suburb, forming the N. part of Gorleston par., consists principally of neat and substantial private residences; with docks, timber wharfs, and building yards, on the river, in which much of the business of this port is carried on. The other distinct group of buildings in Gorleston, which forms the village or town of that name, lies considerably more to the S., nearer to the entrance of the harbour. Yarmouth quay is one of the most extensive and finest in England: it is upwards of 1 m. in length, and in some places 150 yards in breadth, having in its centre a planted promenade. Here is the town-hall, a handsome edifice with a Tuscan portico; the council chamber, which is highly decorated, has a full-length portrait of George II. The Star Inn, near the town-hall, was once the residence of Bradshaw, president of the High Court of Justice which condemned Charles I.; and some of its apartments still remain apparently as he left them, or even as they were at an earlier period, for the house is of the Elizabethan age. Yarmouth parish church is one of the largest ecclesiastical edifices in the kingdom. It was originally founded in the time of William II.; but the most ancient parts of the present edifice date no further back than about 1250; only a portion of the building is early English; other parts, particularly the windows, being of the Decorated and Perpendicular styles. It is 230 ft. in its greatest length, by 108 ft. in breadth. At the W. end are four octangular towers, the outermost of which are surmounted with plain pinnacles, as are the octangular towers at each angle of the S. transept. The tower, at the intersection of the transepts with the nave, formerly decorated with pinnacles, is now embattled, and supports a tall tinned spire erected in 1807, a conspicuous mark from the sea. The part of the interior W. of the tower forms a spacious choir, the ceiling of which is panelled in compartments, having coats of arms

of different branches of the royal family of England, and of the Fastolfs, Gournays, Bardolfs, and other proprietors of the neighbouring castle of Caistor. The organ in this church is one of the finest in England, and it has many interesting monuments. The living, a perpetual curacy, worth 243*l.* a year, is in the gift of the dean and chapter of Norwich. A chapel-of-ease was built in 1716; and the living, a curacy worth 100*l.* a year, is in the gift of the corporation of Yarmouth, the minister's salary being derived from a local duty on coal. The living of St. Peter's church, an edifice in the Tudor style, built under a recent act, is a perpetual curacy, worth 160*l.* a year, in the gift of the incumbent of St. Nicholas's church. Attached to the living of Gorleston and South-town is a curacy, with a separate church, a modern erection, called St. Mary's Chapel. There are several other churches and chapels for R. Catholics, Independents, Unitarians, Baptists, Friends, and Wesleyans. Some remains exist of various convents suppressed at the Reformation. A free grammar-school was formerly supported by the corporation, but it ceased to exist about the end of last century. The Children's hospital, founded in the reign of Edward I., is under the government of the corporation, and has an income of 857*l.* a year: it serves as a workhouse, and also maintains and clothes 30 boys and 20 girls, and 100 children are taught as day scholars. All children of parents belonging to the town are eligible to be admitted as day scholars, and, as vacancies occur, to become boarders by rotation, according to seniority. The charity school, founded in 1713, clothes and educates a considerable number of children: here, also, is a Lancastrian school, which educates about 150 boys; a girls' school, founded in 1810, for educating and clothing 80 poor girls; and a proprietary grammar school, founded in South-town in 1833. The Fisherman's hospital, established and built in 1703, was chiefly supported by an annual government grant of 160*l.* a year, deducted from the beer duties, till 1832, when it was discontinued, in consequence of the repeal of the beer duty. The hospital is, however, otherwise endowed, and, at the date of the late inquiry, had an income of 56*l.* 10*s.* a year. Warren's charity, established in 1694 for the general relief of the poor, sick, orphans, and widows, has an income of about 375*l.* a year; and there are several other endowments for schools and other charitable purposes.

Ship-building, and the various trades with it, are carried on to some extent in Yarmouth; nevertheless it cannot be considered as a manufacturing town, but derives its importance and prosperity from the trade and commerce which it owes to its situation and port. The rivers Yare, Waveney, and Bure, which unite in Braydon water adjoining the town, are navigable; the first to Norwich, the second to Bungay, and the Bure to Aylsham; and they secure to Yarmouth an extensive trade in the exportation of the agricultural produce of the districts traversed by these rivers, and in supplying them with coals and other heavy goods. The export of grain and malt from this port is considerable, of barley greater than from any other part in England; but the principal business of Yarmouth is the herring and mackerel fisheries, and the curing and exportation of the herrings to foreign countries, particularly the states bordering on the Mediterranean. An extensive timber trade with the Baltic is also carried on, and a considerable number of square-rigged vessels belong to the port. Yarmouth roads have long been the principal rendezvous of the vessels in the collier trade, and the town derives some advantages

from the supply of fresh provisions to them. The harbour of Yarmouth is formed by the river Yare: it has an awkward entrance obstructed by a bar. Great attention, however, appears to be bestowed on remedying this defect, and on the improvement of the port generally. Vessels drawing about 12 ft. water, or of about 200 tons burden, can cross the bar, and proceed up the town at spring tides. The chief improvements of the harbour were effected by a Dutchman named Johnson, employed for the purpose, who first erected piers at the mouth of the river.

Yarmouth Roads, between the town and a line of outer sand banks, though so much frequented, are by no means free from danger. They are marked by buoys and floating lights. There belonged to the port, on the 1st of Jan. 1864, 411 sailing vessels under 50, and 199 above 50 tons, the former of an aggregate of 12,090, and the latter of 21,847 tons. There were also, at the same date, 14 steamers, of a total burthen of 762 tons. Yarmouth is the principal seat of the English herring-fishery. The herrings usually make their appearance in the roads about the middle of September, when the fishery begins, and continues till towards the end of November. They are partly cured and partly sent fresh to the metropolis. The fishery of cod, mackerel, skate, soles, red mullet, and whittings is also extensively carried on. In 1863 the gross customs' duties received at Yarmouth amounted to 24,005*l.*

Yarmouth has been, for a long time, more or less frequented as a bathing-place, for which, indeed, it is well fitted by its salubrity and its firm, shelving sea beach. It has, also, a pier projecting 450 ft. into the sea, with public baths, assembly-rooms, a neat theatre, a public library, public gardens, and all the establishments usual at a watering-place. To the N. and S. of the town, facing the sea, are open and level pieces of ground covered with verdure, called the Denes; and on the most southerly of these is a beautiful fluted column designed by Wilkins, erected in 1817 in honour of Nelson: it is 144 ft. in height, and is surmounted by a statue of Britannia. On other parts of the Denes are various batteries, the barracks, a fine edifice, formerly a naval hospital, built in 1809, at an expense of 120,000*l.*; a new workhouse, erected in 1839, at an expense of 8,000*l.*; and a racecourse. On other sides, the environs of Yarmouth have no particular beauty; but the country is well cultivated, and the markets of the town are well supplied. Within a few miles, on the Suffolk side, are extensive remains of the Roman station *Gariannonum*, so called from its situation at the mouth of the *Gariensis*, or Yare; and within a similar distance on the Norfolk side, are the ruins of Caistor Castle, formerly a sumptuous mansion erected by Sir J. Fastolf soon after the battle of Agincourt.

The first charter of incorporation possessed by Yarmouth appears to have been granted by John in 1208; but the governing charter previously to the late acts was that granted by Queen Anne, in 1702. Under the Municipal Reform Act the borough is divided into 6 wards, and is governed by a mayor, 11 other aldermen, and 36 councillors. Yarmouth has sent 2 mems. to the H. of C., with little intermission, since the time of Edward I., the right of voting, down to the Reform Act, having been in the sons of freemen, and in apprentices serving a seven years' apprenticeship to freemen within the bor. Registered electors, 1,606 in 1865. The bor. has a commission of the peace, and a gaol, an admiralty court, and a county court. The maritime jurisdiction of the corporation extends for 10 m. up the rivers Bure, Yare, and Waveney.

Two markets are held weekly, on Saturday and on Wednesday. A fair is held on Friday and Saturday in Easter week.

YARMOUTH, a market town and par. of England, on the NW. shore of the Isle of Wight, at the mouth of the little river Yar, immediately opposite Lymington, and 9 m. W. Newport. Area of par. 50 acres. Pop. of ditto, 726 in 1861. This town, which has long been in a stationary state, would have been unworthy of notice, but for the circumstance of its having enjoyed the privilege of sending 2 mems. to the H. of C., from the era of Edward I. down to the passing of the Reform Act, by which it was most properly disfranchised. It was one of the most perfect specimens of a proprietary bor.

YECLA, a town of Spain, prov. Murcia, at the foot and on the declivity of a hill, 43 m. N. by E. Murcia. Pop. 11,669 in 1857. Yecla was formerly walled and had a fortress, but of these there are now no remains. Its principal buildings comprise 2 par. churches, some convents, a hospital, an ecclesiastical tribunal, and a prison. Its neighbourhood is very fertile; and its inhabs. are mostly occupied in the production of corn, flour, wine, brandy, and leather. Near Yecla are the traces of a more ancient town, where various Roman antiquities have been discovered.

YEDDO, or **JEDDO**, the chief city of Japan, and the residence of the tycoon or military emperor; on the SE. shore of the island of Nippon, prov. Monsasa, at the bottom of the Bay of Yeddo; lat. $36^{\circ} 39' N.$, long. $140^{\circ} E.$ Its pop. has been variously estimated at from 700,000 to 1,500,000; but the probability is, that the first of these numbers is beyond the mark. Yeddo is surrounded by a ditch, and intersected by numerous canals and branches of the river Tonak, which are navigable for vessels of moderate burden. It has 2 large suburbs. Its internal plan would appear to be less regular than that of most other Japanese cities; but its streets and squares are clean, and some of the former are of prodigious length. Each street is appropriated to persons of one trade only, lined with covered arcades, and closed at night by gates at each extremity. The houses are mostly two stories in height; but being built almost wholly of wood, destructive fires are very frequent. Yeddo has many temples, Buddhist convents, and other large public buildings: the emperor's palace occupies a large extent of ground. This city has a considerable trade; but there are no materials for forming any estimate of its amount. (For full particulars concerning Yeddo see the interesting work of Sir Rutherford Alcock, 'the Capital of the Tycoon,' 2 vols. London, 1863.)

YEMEN, a district of Arabia, which see.

YENISEI, a great river of N. Asia, in Siberia, through the central part of which it flows; its basin lying between those of the Lena to the E., and the Obi to the W., is supposed to comprise an area of near 1,000,000 sq. m., being about the same size as the prov. of Yeniseisk. The Yenisei rises within the Chinese empire, not far from lat. $51^{\circ} N.$, long. $98^{\circ} E.$, and proceeds at first W. for about 5° of long., to near the point where it leaves the Chinese frontier. It then turns northward, and pursues generally a northerly course to the Arctic Ocean, which it enters by a wide estuary called the bay of the 72 islands, the mouth of which is in about lat. $72\frac{1}{2}^{\circ} N.$, long. $85^{\circ} E.$, about 200 m. E. of the Gulf of Obi. The entire course of the Yenisei has been estimated at 2,600 m. Its chief affluents join it from the E., its tributaries from the W. being of much less importance. Various towns in the upper, with

Krasnojarsk and Yeniseisk, in the middle and lower part of its course, are on its banks; Irkutsk is on its great tributary the Verchnie-Tungooska, which flows out of Lake Baikal. As far as Krasnojarsk, it runs through a mountainous country, and thenceforward to Yeniseisk, where its width, when highest, is about 1 m.; its banks are elevated and precipitous. A survey of the river was completed in the last century by the Russian government up to this town; and from this it appears that its channel varies from 2 to 8 fathoms in depth. This noble stream, however, like the other large rivers of Siberia, is but of little use, inasmuch as it flows, for the most part, through desolate wastes; its embouchure being also in a frozen sea, and the river itself being frozen over for the greater part of the year. The Russian surveyors were stopped in their progress upwards, by the ice at Turnschansk, on the 1st of October, and by the 10th the river was completely frozen over; and it was not till the succeeding 4th of June that they were enabled to proceed with their survey.

YEOVIL, a munic. bor., market town, and par. of England, co. Somerset, hund. Stone, on the border of Dorset, on the Yeo or Ivel, a tributary of the Parrott, here crossed by a stone bridge, 18 m. S. Wells, and 141 m. W. London by Great Western railway. Pop. of munic. bor. 7,957, and of par. 8,486 in 1861. Yeovil comprises about twenty streets and lanes, some of which are wide and open thoroughfares, the houses being generally good and built of freestone. The par. church, a light Gothic structure, with a large plain tower at the W. end, is supposed to date from the time of Henry VI. An ancient crypt, an adjoining chapel, and the handsome altar in the church, are worthy of notice. Here, also, are places of worship for Unitarians, Baptists, Wesleyans, Independents, and other dissenters. The free-school, endowed in 1707 and subsequently, has an income of 114*l.* a year; and, at the date of the last inquiry, 30 boys were taught reading, writing, and arithmetic, 14 of whom were clothed and apprenticed. An almshouse for a master, 2 wardens, and 12 poor men and women, has an income of 291*l.* a year; and, exclusive of these, there is an almshouse for 4 poor women, and several minor charities.

Yeovil was at one period celebrated for its woollen manufactures. But these appear to have been early superseded by the glove trade, the latter having attained to considerable importance in the town so far back as the middle of the 16th century. Most of the manufactures are employed in making men and women's fine gloves; which pass in the retail shops as kid gloves, but are, in reality, made from lambskins imported from Italy, Spain, and Germany. These skins are mostly dressed into leather in Yeovil. The quantity of gloves made in Yeovil, of all sorts, may be estimated at 300,000 dozens annually. The use of cotton and woollen gloves, and the importations of French and other foreign leather gloves, has in late years seriously depressed the trade of Yeovil.

Yeovil claims to be a bor. by prescription, its government having been till lately vested in a portreeve and 11 burgesses; but their authority was very circumscribed. A county court has been established here. Market day Friday, when a good deal of butter, cheese, and corn is sent into town; and large quantities of the butter made in the surrounding district are purchased, and sent to London, to be sold as Dorset butter. Fairs, June 28 and Nov. 17, chiefly for farm stock.

YEZD, a considerable city of Persia, in the E.

part of which it is situated, about 250 m. E. by S. Ispahan. Pop. estim. at 31,000 in 1862. The city is situated in a sandy desert, near a range of high mountains, and has a fort, but no other defensive works. Being at the point of union of the principal roads connecting Ispahan, Kirman, Meshed, and Herat, it is consequently a considerable emporium. Its bazaar is said to be well supplied with provisions; though, from the sterility of the adjacent country, its supplies of corn have, for the most part, to be brought from Ispahan, and cattle are both scarce and dear.

The manufacture of silk stuffs in this city was, some years ago, superior to any other in Persia; and the village of Tuft, about 8 m. SW., was equally famous for its *numuds*. Here, also, are some fabrics of arms and sugar refineries. Formerly many Hindoos were settled in the town, but these were driven away by the exactions of a late Persian governor: it has still, however, numerous families of Parsees (Guebres, or fire-worshippers) among the pop., this being almost the only town in the Persian dominions where they are now met with. Though an oppressed, they are an exceedingly industrious people.

YONNE, a *dép.* of France, reg. centre, formerly comprised, for the most part, in Champagne and Burgundy, principally between lat. 47° 30' and 48° 30' N., and the 3rd and 4th degrees of E. long., having NW. the *dép.* Seine-et-Marne, NE. Aube, E. Cote d'Or, S. Nièvre, and W. Loiret. Area, 742,804 hectares; pop. 370,305 in 1861. Surface undulating; the hills scarcely any where rising to more than 690 ft. in height: the most elevated are in the SW., separating the basin of the Seine from that of the Loire. The Yonne, whence the *dép.* takes its name, rises in Nièvre, near Château-Chinon, and runs generally northward to the Seine, which it enters at Montereau, in the *dép.* Seine-et-Marne, after a course of about 177 m.; for 70 of which, or as high as Auxerre, it is navigable. It traverses the *dép.* of Yonne nearly in its centre, receiving within its limits the Oure, Serein, and Armançon from the E., its tributaries from the opposite side being inconsiderable. It communicates with the Loire by the canal of Nivernais; and with the Saone by that of Burgundy. A great part of the soil is calcareous, or gravelly, but about 300,000 hectares consist of rich land; and more corn is grown than is required for home consumption. The arable lands are estimated to comprise 453,100 hectares; meadows, 31,265 do.; vineyards, 37,543 do.; and woods, 146,570 do. The wines of this *dép.* are known as those of Lower Burgundy; the red wines of Tonnerre and Auxerre are especially esteemed; and the secondary growths of Epineuil and Irancy are also in high estimation. Chablis, the best of the white wines, is served up by the French epicures with oysters. The consumption of the *dép.* does not exceed 250,000 hectolitres, the rest being mostly sent to Paris, the N. of France, and foreign countries, little brandy being made. The orchards, which comprise nearly 6,000 hectares, are of importance; and Yonne, along with Loiret, supplies Paris with all the *raisinet* consumed by its inhabs. Fewer cattle and sheep are reared in this than in any other part of the central *déps.* The forests abound with game, and produce great quantities of charcoal, the trade in which is extensive. Iron, marble, lithographic and many other kinds of stone, gun flints at Cerilly, lime, and clay, are the principal minerals. Bricks and tiles are made in large quantities, and glass and earthenware in various places. The manufac-

blankets, serges, beetroot sugar, paper, and glue; hydraulic clocks made at Sens, and barrels at Avallon. The chief trade of the *dép.* consists in the export of its wines, corn, timber, and other agricultural produce. Yonne is divided into 5 arronds.; ch. towns, Auxerre the cap., Avallon, Joigny, Sens, and Tonnerre.

YORK, a *marit. co.* of England, being by far the largest and most important in that part of the U. Kingdom, is bounded on the N. by the *co.* Durham, E. by the North Sea, S. by the *co.* of Lincoln (from which it is separated by the Humber), Nottingham, and Derby, and W. by Lancaster and Westmoreland, and a small part of Chester. Area, 3,669,510 acres, of which about 2,500,000 are supposed to be arable, meadow, and pasture. It is divided into the districts of the North, East, and West ridings, being respectively as large as *cos.*, and each of them having its particular lord lieutenant: there is besides a separate smaller district called the city of York and Ainsty; but the latter, except in so far as the city is concerned, has been united to the W. riding. The extent and population of these different divisions are as follows:—

| | Area, Acres | Inhab. Houses in 1861 | Pop. in 1861 |
|---------------------|-------------|-----------------------|--------------|
| North Riding . . . | 1,275,820 | 50,178 | 211,109 |
| East Riding . . . | 711,360 | 49,109 | 274,425 |
| West Riding . . . | 1,629,890 | 315,722 | 1,530,007 |
| City and Ainsty . . | 52,440 | 9,162 | 45,385 |

Owing to its extent and various capacities, Yorkshire presents an epitome of the whole kingdom with respect to surface, soil, products, and industry. Some of the mountains on its W. border, are among the highest in the great central ridge extending from Scotland S. to the middle of Derbyshire; and both there and in its N. division are very extensive tracts of high, sterile, moor ground. In the E. riding a large tract of wolds extends from Flamborough Head to Filey Head, on the coast, to Pocklington and Market Wighton; but, notwithstanding these deductions, Yorkshire contains a great extent of the most excellent land. The vale of York, the district of Cleveland in the N. and that of Holderness in the SE., besides various other extensive tracts in different parts of the *co.*, are exceedingly fertile, possessing soils suitable for every purpose, either of arable or stock husbandry. The climate is as various as the soil and elevation; but, except on the high grounds, it is mild and early, and is everywhere salubrious, except on the low, marshy grounds along the Humber. Agriculture in a medium state of improvement, not so far advanced as in Northumberland or Lincoln, but not so backward as in several other *cos.* There is in this respect, however, a great difference in the different ridings, agriculture being in a much more advanced state in the W. riding than in either of the others. The general rotation is there—1st, turnips or fallow; 2nd, barley; 3rd, seeds; 4th, wheat. Bone manure is much used, but not to so great an extent as rape-dust; the latter, however, is principally used for wheat, the bone manure being decidedly superior for turnips. Drainage is much neglected in the N. and E. ridings. In the latter no system is acted upon, except in the wolds, where the rotation is—1st, turnips; 2nd, barley; 3rd, seeds; 4th, wheat. In other parts of this riding, and in the N. riding, two corn crops not unfrequently follow in succession, and but few operations are performed as they ought to be. York is more of a

bers of horses are bred in most parts. Those in the highest estimation are called Cleveland bays, partly from the district in which they were originally found in the greatest perfection, and partly from their colour; but they are now very widely diffused. They are in extensive demand as carriage-horses. Cattle very various: they consist mostly of the long-horned breed; but there are considerable numbers of short horns, with endless varieties produced by crosses between these and other breeds. The Teeswater and Holderness breeds are the greatest favourites with the graziers; but the long horns, or a cross between them and the short horns, are preferred by the dairy farmers. Yorkshire supplies most of the cows used in the London dairies. Their average yield of milk may be estimated at from 22 to 24 quarts a day, but it does not yield a proportional quantity of butter. Sheep of all varieties, and stock very large, supposed to amount to about 1,200,000 head, producing annually about 28,000 packs of wool. Many hogs are kept, and Yorkshire hams are celebrated in all parts of the country. Property in the W. and N. ridings very much subdivided; but in the E. riding it is less subdivided than in most parts of England, and many families in this riding have held their estates for centuries. Farms of all sizes, but the majority seem to be unusually small. Most part of these farms are held from year to year, or by tenants at will; and, notwithstanding the statements that have been made to the contrary, it is probable that this species of tenure, by diminishing the security of the farmer, has operated in no ordinary degree to retard the progress of improvement. Farm-houses and buildings for the most part rather indifferent.

The W. riding of this co. stands in the very first rank as a manufacturing district. Leeds, Bradford, Huddersfield, Halifax, and Wakefield are the great seats of the woollen manufacture; flax-spinning is extensively carried on at Leeds; and the hardware manufactures of Sheffield rival, and in some departments, as that of cutlery, far surpass those of Birmingham. There are extensive iron-works at Rotherham; and latterly the iron-works of Yorkshire have made considerable progress. Cotton manufactures have been established at Easingwold, and in some other parts of the W. riding. The manufactures in the other ridings are but of trivial importance. The valuable beds of coal found in the vicinity of Leeds, Sheffield, Bradford, and Wakefield have been the principal source of their prosperity. Besides coal and iron, Yorkshire has mines of lead and veins of copper; alum works were established near Whitby in the reign of Elizabeth, and are still worked (see WHITBY); and there are in various places excellent limestone and freestone quarries. Principal rivers, Ouse, Swale, Ure, Wharfe, Aire, Calder, Don, Derwent, Hull, and Esk; the waters of all these, except the last, being poured into the great estuary of the Humber. The canals, particularly in the W. riding, are numerous, being some of them of great importance, and the principal towns are also connected with railways. The co. is divided into wapentakes and liberties, and contains 613 parishes. It sends 39 mems. to the H. of C., viz. six for the co., being two for each riding; two each for the city of York and the bors. of Leeds, Sheffield, Hull, Beverley, Bradford, Halifax, Doncaster, Pontefract, Ripon, Knaresborough, Malton, Richmond, and Scarborough; and one each for the bors. of Huddersfield, Whitby, Wakefield, Northallerton, and Thirsk. Registered electors for the N. riding, 15,438 in 1865; for the E.

riding, 7,400; and for the W. riding, 40,695 in 1865. The gross annual value of real property assessed to income-tax, in 1862, was—for the North riding, 1,487,566*l.*; for the East riding, 1,286,774*l.*; and for the West riding, 3,964,820*l.*

YORK (an. *Eboracum*), an ancient and celebrated city of England, being, under the Romans, the cap. of Britain, and at present the second city of the kingdom in respect of rank, though not of importance. It is a county of itself, and a parl. and mun. bor., locally situated near the centre of the co. York, of which it is the cap., at the junction of the N., E., and W. ridings; on the Ouse, at the confluence of the Foss, 22 m. NE. Leeds, 33 m. NW. Hull, 170 m. NNW. London, and 160 m. SSE. Edinburgh, on the Great Northern railway. Pop. of parl. city, 45,385 in 1861. The city is inclosed by its ancient walls, supposed to have been erected by Edward I., about 1280; they are flanked with numerous towers, and having been repaired and renovated in 1831, form a delightful promenade. They are pierced by five principal gates, termed bars, and by five smaller gates, or posterns, some of the former being remarkable structures. The Ouse and the Foss traverse the interior of the city, uniting at its S. extremity. The Foss is crossed by four bridges, and the Ouse by a single bridge, a handsome structure of three arches, constructed between 1810 and 1820, at a cost of 80,000*l.* The span of the central arch is 75 ft., that of the other arches 65 ft. each; the total width of the bridge within the parapet is 40 ft. A new iron bridge leads from Lendal on the one side to the railway station on the other; it was erected at a cost of 85,000*l.* Handsome flights of steps at each end conduct to spacious quays on both sides of the river, called the King's and Queen's staiths, to which vessels of 90 tons may be moored.

York consists of several parallel lines of thoroughfare, running N. and S., crossed by others, which are generally shorter and more irregular, in an opposite direction. The principal of the former, nearly 2 m. in length, consists of Bootham, Petergate, Colliergate, Walmgate, with their continuations. The line crossing it, and composed of Micklegate, Ousegate, Pavement, St. Saviour's-gate, is almost as long. In the centre of the city is a fine broad open space called Parliament Street, terminating at one end in Sampson Square; and at the other end in the Pavement, the site of the corn, poultry, and other markets; and wool and leather fairs are held in Peascholme Green, an open space in the E. part of the city. There are a few other open spaces in the heart of the city, as St. Helen's Square; but none of them deserve any particular notice. York has been much improved and modernised of late years, but it still preserves an air of antiquity in its narrow streets and old-fashioned houses. Many of the latter formerly overhung the streets, the upper stories projecting beyond the lower; but a good many of these have been taken down, and buildings in a modern style have been erected in their stead. Some of the streets also have been widened, and the city generally is well paved and lighted with gas. In consequence of the rise of Liverpool and Manchester, the increasing importance of many of the large towns of Yorkshire, and the greater facilities of communication between the different parts of the kingdom, York no longer enjoys that pre-eminence in the N. she possessed in the earlier part of last century. Still, however, she is not declining in any respect; but is, on the contrary, increasing in size. In the outskirts many substantial and even superior buildings have been recently erected; and the city is extending itself

nearly in an equal degree in almost all directions. To the NE. of the town was formerly an open space known by the name of Heworth Moor. In 1817 this was enclosed; and in this neighbourhood a great number of substantial and excellent houses have been built since the period of the enclosure. Here also many market gardens are cultivated; and altogether the district is thriving and populous, and presents undoubted testimony of progressive and prosperous industry. On the W. of the Ouse along the road from Leeds to the 'Micklegate' are several good houses, many of which have been recently built, and are occupied chiefly by persons who have either retired from business, or are engaged in business in the older part of the town; the number of these houses is constantly increasing. The parishes beyond the Foss, through which the road to Hull passes, contain for the most part a pop. of a poor description.

York minster, or cathedral, is the finest edifice of its kind in the kingdom. It stands in the N. part of the city, and, except on its N. side, where a considerable space of ground has been cleared, is closely hemmed in by mean-looking buildings. The present edifice, said to have been raised on the site of a church originally founded by Edwin king of Northumberland, in the 7th century, was principally erected during the 13th and 14th centuries. It is without cloisters, and built in the form of a cross; consisting internally of a nave with two aisles; a transept, with aisles and a lantern in the centre; a choir, with aisles, and vestries or chapels on the S. side; and a chapter-house, with a vestibule, on the N. side. Its principal measurements are as follow:—length, internally, 524½ ft. (being greater than that of any other cathedral in England, except Winchester); internal length of transept, 222 ft.; length of nave, 264 ft.; do. of choir, 181 ft.; height of both, 99 ft.; breadth of nave, 109 ft.; height of great tower, 234 ft.; height of W. towers, each 196 ft. This magnificent structure has a portion of all the styles of English architecture; but the Norman only appears in a fine crypt, under a part of the choir, which reduces the general appearance to the three later styles; of these, the transepts are early English; the nave and arches supporting the great tower are decorated; and the choir and upper part of the great tower are perpendicular. The W. front has been compared to that of the cathedral of Rheims for richness, and beauty of architectural design. It is divided into 3 compartments, by 2 massive graduated buttresses enriched on every face with tabernacle-work, and the elevated battlemented gable is covered with ornamental tracery of the most florid kind. There are 3 entrances in this front; over the central of which is the unrivalled W. window, divided into 8 portions by upright mullions, which in the upper part beautifully diverge into the leafy tracery peculiar to the 14th century. The magnificent towers which flank this side exactly correspond; they are supported by buttresses, and have at their summits 8 crocketed pinnacles connected by a battlement. Almost the whole of the W. front is filled with niches, but these, with few exceptions, are empty. The S. side, though finished less elaborately than the W. front, is very imposing. The porch in the S. transept is the usual entrance to the church, and is deeply recessed by numerous mouldings; over it is a beautiful manycoloured window, and the gable is surmounted by an enriched pinnacle. The N. side is in a similar style to the S., though finished in a plainer manner; and in its transept is the remarkable stained glass window termed the 'five sisters.' The E., like the W. front, is in three grand divisions, separated by buttresses, the

central of which is wholly occupied by a magnificent window. Like the W. front also, it is covered with niches, though only a very few of the statues formerly occupying them now exist. On this front the influence of time is very perceptible. The central tower, 204 ft. in height, is probably unfinished. It has two large windows, with two tiers of mullions, in each of its four sides. But it wants a spire; and, when contrasted with the W. towers, has a heavy appearance.

The interior of the minster corresponds in beauty and grandeur with the exterior. A careful restoration of the cathedral in most of its parts had been completed, when, on the 2nd February, 1829, it was set on fire by a lunatic; the conflagration thence ensuing destroyed the fine organ, and all the woodwork and roof of the choir. Another destructive fire broke out on the 20th May, 1840, in the SW. tower, by which its fine ring of 10 bells and the clock, with part of the roof of the nave, were burnt. These injuries, however, were completely repaired; the choir was renovated after the fire of 1829, under the superintendence of Sir R. Smirke. The new roof is wholly constructed of teak, presented by government; and is covered with lead procured from the mines of the Greenwich hospital estates. The remarkable stone screen, which separates the choir from the nave, stands in its original position, and is of a most gorgeous and florid style, ornamented with fifteen statues of the kings of England, from William I. to Henry VI., all of which, except the last, are of ancient sculpture. The new organ, placed above the screen, and presented by the late Earl of Scarborough, is of the most superb description, and has some pipes 32 ft. in length. A great deal of fine stained glass, many sculptured coats of arms, and the tombs of many of the archbishops of York, attract notice in the interior; though, on the whole, this cathedral is less rich in monuments than many others in the kingdom. From the N. transept, a vestibule leads to the chapter-house; this is an octagonal building, 63 ft. in diameter, and 67 ft. 10 in. in height, supported on the outside by eight massive buttresses. 'The more minutely,' says Rickman (*Gothic Architecture*, p. 265), 'this magnificent edifice is examined, the more will its great value appear. The simplicity and boldness, and at the same time the great richness of the nave, and the very great chastity of design and harmony of composition of the choir and great tower, render the building more completely one whole than any of our mixed cathedrals; while the exquisite beauty of the early character of the chapter-house, and its approach, forms a valuable link to unite the early English transepts and the decorated nave. This chapter-house is by far the finest polygonal room without a central pier in the kingdom, and the delicacy and variety of its details are nearly unequalled. Too much praise cannot be given to the dean and chapter for their careful restoration of every decayed portion. By this restoration the whole of the W. front may be considered in as good a state as when first erected; a considerable portion of the S. side is also restored.' The vestries on the S. side of the church contain, among many other antiquities, a chair in which several of the Saxon kings were crowned, and which is said to be older than the cathedral itself; and the drinking horn of Ulphus, a Saxon prince of Deira, presented to the cathedral in 1036, with a large extent of country to the E. of York, still in the possession of the see. The library is at a short distance from the cathedral on the N. side. The chapter consists of a dean and 4 canons residentiary, sharing an income of 1,352*l.* a year, and 26 prebendaries

having separate revenues. The archbp. of York has the title of primate of England, with the privilege of crowning the queen-consort, and ecclesiastical authority over the province of York, comprising the sees of York, Durham, Carlisle, Chester, Ripon, and Sodor and Man.

Previously to the dissolution of the religious houses by Henry VIII., besides 17 chapels, 16 hospitals, and 9 religious houses, there were in this city 41 par. churches, but of these last only 23 now remain. Many of these would be worthy of notice elsewhere, but they sink into insignificance after the cathedral. St. Michael-le-Belfrey, in the minster yard, is the largest and most elegant, and with St. Martin's in Conev Street, is in the late perpendicular style. All Saints, North Street, and St. Mary's, Castle-gate, have towers and lofty spires, and are mostly perpendicular with some earlier portions; St. Denis, St. Lawrence, and St. Margaret, have good Norman doors, with portions of later date; and St. Mary Bishop-hill, the elder, has portions of good early English and decorated work, amidst various alterations and insertions. In many of the churches are considerable quantities of old stained glass. All Saints in the Pavement is of very ancient foundation, and its N. side is almost wholly built out of the ruins of *Eboracum*, though other parts of the edifice are quite modern. A large lamp still preserved here used to be hung at the summit of this building, as a beacon for travellers at night through the forest of Galtres, which extended from Bootham-bar a considerable distance N. of the city. Most of the livings of these churches are rectories or vicarages in the gift of the crown or the dean and chapter of York.

The remains of St. Mary's Abbey, originally founded by William Rufus in 1088, and refounded in 1270 for black monks of the Benedictine order, are very interesting. The abbot was mitred, and had a seat in parliament; and at the time of the dissolution the revenues of the abbey amounted to 2,085*l.* 1*s.* 3*d.* a year. The buildings were for the most part destroyed, between 1701 and 1717, and their materials used for rebuilding the castle of York and St. Olave's church, and repairing Beverley minster. Almost the only parts remaining are a gateway, and the N. wall of the abbey church, 371 ft. in length, having fine light Gothic window-arches, with highly finished carved capitals. The remaining part of the church furnishes the richest and most beautiful specimens of transitions from early English to decorated that remain for examination; but being entirely exposed, it is fast decaying. The abbey had an extensive and strongly fortified precinct without the ancient walls of the city; and some of its walls and towers, forming an extraneous portion of the old city defences, may still be seen between Bootham-bar and the Ouse. The remains of St. William's College, founded by Henry VI., exist in a street near the cathedral. St. William's chapel stood on the old bridge over the Ouse, and was consequently taken down with that structure. The cloisters of St. Leonard's and St. Peter's hospitals, efficient remains of the architecture of the time of William I. and II., are now used as wine vaults. The dissenters, who form a numerous and respectable body in York, have at least a dozen places of worship, the oldest of which is the Presbyterian (Unitarian) chapel, in St. Saviour-gate. The Wesleyans have an elegant new chapel in the same street, with a massive Ionic portico, besides three other chapels. The Independents have two chapels, one of which (Salem Chapel), erected at the end of St. Saviour-gate, is a large

and handsome edifice. There are also meeting-houses for Primitive and other Methodists, and Friends; a fine Rom. Cath. chapel, a nunnery, and chapel outside Micklegate-bar.

York Castle, towards the S. extremity of the city, between the Ouse and Foss, near their confluence, occupies a space of nearly 4 acres. It was originally built by William the Conqueror, who also erected another fortress, at York, on the other side of the Ouse. But only a small portion of the original structure of the castle remains, except Clifford's Tower, a keep added by the Conqueror to the rest of the edifice, and erected upon an artificial mound, which had probably served for the site of a Roman fortress. York Castle, which was long garrisoned for the king in the civil wars, is not now a defensive military post, but has been converted into the co. prison and hall. The basilica, or co. hall, on the W. side of the great area, is entered by a portico, supported by Ionic columns, and internally divided into civil and criminal courts, with handsome rooms, for the use of the grand and petit juries, and counsel. The building, on the E. side of the area, which is uniform in design with the court-house, is chiefly appropriated to female prisoners. Between 1821 and 1836, a new prison was built here, at an expense of 203,580*l.*, on the panopticon principle, with 8 airing courts, the whole being surrounded by a lofty stone wall, 35 ft. high. The city gaol and house of correction is on the W. side of the Ouse; its outer wall encloses an area of nearly three-fourths of a mile in circuit: it is appropriated partly to prisoners before trial. Near it is the *vetus ballium*, or old baile, a mound corresponding with that on which Clifford's Tower is built, having probably had the same origin and purpose.

Most of the other edifices, of public interest, are in the N. part of the city. The mansion-house, a large and handsome edifice, erected in 1725, has in front a rustic basement supporting an Ionic colonnade, with a pediment on which are the arms of the city. The state-room, 49½ ft. in length by 27½ ft. in breadth, has paintings of William III., George II. and IV., and of several noblemen and gentlemen. The guildhall, behind this edifice, built in 1446, comprises one of the finest Gothic halls in the kingdom, 96 ft. in length, 43 ft. in width, and 29½ ft. in height, the roof being supported by 10 octagon pillars on stone bases. In the windows are some fine specimens of stained glass, and over the entrance is a full-length statue of George II. In this hall, the lords-president of the north formerly held their court; and here also the Scotch received the 200,000*l.* paid them by parliament for the assistance they afforded against Charles I. At the end of the hall is the city assize and sessions court, and adjoining, are the council chambers of the corporation. The assembly-rooms were erected, by subscription, in 1730, and are entered under a portico, resting upon light stone columns, supporting a balustrade. The walls are supported by 44 light and elegant Corinthian columns, with a beautiful cornice, the upper part of the building being of the composite order, and richly adorned. The rooms are lighted by 44 windows. The grand assembly-room is constructed from a design by Palladio, and measures 112 ft. by 40 ft., and 40 ft. in height. It was used for concerts till about 1825, when, being found too small, a magnificent concert-hall adjoining was built, 95 ft. in length, 60 ft. in breadth, and 45 ft. in height, capable of containing 1,700 persons, 400 being accommodated in a gallery supported by cast-iron pillars. It is lighted with gas, and fitted up in a style of much

elegance; its cost, including the purchase of the ground, amounted to 9,400*l.* The theatre, built by Tate Wilkinson, in 1765, and recently altered externally in the Elizabethan style, is extremely commodious. The Yorkshire Philosophical Society, founded in 1822, obtained, in 1826, a grant of 3 acres of land, part of the site of St. Mary's Abbey, from government, for a suitable building and botanic garden. The museum, built between 1827 and 1830, is an elegant edifice, with a front towards the Ouse, 200 ft. in length, and has a spacious hall, a library, a theatre for lectures, with large collections in geology, mineralogy, zoology, comparative anatomy, and a chemical laboratory. The affairs of the society are conducted by a council of 12 members, and officers elected once a year. The York Subscription Library, with 17,000 vols., occupies a spacious suite of rooms in St. Leonard's Place: it is supported by about 400 members.

Outside Monk-bar is the co. hospital, founded in 1749 by Lady Hastings, with an income of about 1,400*l.* a year. The building has a front of 75 ft., by a depth of 90 ft., and encloses a court measuring 26 ft. by 35 ft. It is well kept, and capable of accommodating 100 patients. Without Bootham-bar is a lunatic asylum, built by subscription in 1777, 3 storeys in height, having a front 132 ft. in length, with extensive grounds; and about 1 m. from the city is the Retreat, an establishment of a similar nature under the management of the society of Quakers. Here, also, is a dispensary, founded in 1788; an eye infirmary, established in 1831, and various medical and other charities for the benefit of the poor. The educational establishments are on a very extensive scale, at least in so far as elementary and the more ordinary branches of instruction are concerned. A masters' school, in connection with the York Diocesan Society, occupies the extensive premises in Monkgate, formerly used as the Unitarian college. This last, the chief seminary of the Unitarians in England, was removed from Manchester to York in 1803, but has lately been again removed to Manchester. Here also are national schools, established in 1812, in which above 700 children of both sexes are educated; British schools for about 200 boys and 300 girls; the blue coat boys and grey coat girls' schools, established in 1705, having an income of about 1,500*l.* a year; Haughton's charity school, for the education of 20 poor children of the par. of St. Crux; the spinning school, established by two ladies in 1782, where about 60 girls are instructed in reading, knitting, and sewing, and principally clothed; with Sunday schools.

Bishopsthorpe palace, the seat of the archbishop, is about 3 m. SE. from the city. The grounds of the last are frequently resorted to in summer by the inhabs., whose principal public promenade in the city is the New Walk, a gravelled terrace planted with elms, extending from the neighbourhood of the castle for nearly 1 m. along the Ouse.

The city of York claims to be a corporation by prescription. Its earliest extant charter is one of Henry II., without date; but its governing charters, before the Municipal Reform Act, were of the 16th Charles II. and the 10th Geo. IV. By the latter, the corporation officers were the mayor, 12 aldermen, the 2 acting and the former sheriffs, the recorder, city counsel, town clerk, coroners, and 72 common councilmen, who sat, as in London, in two separate courts. All the corporate officers were freemen, the freedom of the city being acquired by birth or apprenticeship to a freeman within the city liberty, and by gift or

purchase from the upper house, the price of purchase varying from 25*l.* to 150*l.* Under the Municipal Reform Act, the bor. is divided into 6 wards, and is governed by a mayor, recorder, 12 aldermen, and 36 councillors, 6 from each ward. The chief magistrate has the title of Lord Mayor, conferred by Richard II., in 1389, which title he consequently enjoyed before the chief magistrate of the metropolis. York sent 2 mems. to the H. of C. in the 49th of Hen. III., and has continued to do so regularly from the time of Edw. I., the right of election having been formerly vested in the corporation and freemen. Reg. electors 4,620 in 1861. The election for the N. riding of the co. of York is held here. Courts of assize for the co. and the city are also held here twice a year, besides quarter sessions, a court of pleas, and petty sessions twice a week; and there were formerly several other courts, now obsolete. The corp. of York had exclusive jurisdiction over the Ainsty, a large district comprising about 35 towns and villages, from the time of Henry VI. till a late act annexed the Ainsty to the W. riding of the co.

Under the Romans, York was, no doubt, the commercial emporium of the N. part of the island, and it appears to have been a city of some commercial importance in the time of Edw. III., who established a woollen manufacture in the city, which continued to flourish for a lengthened period. At present its trade is comparatively small: and the largest amount of capital now employed in any one branch by the citizens is supposed to be in the drug trade. Considerable business has, however, been done latterly in the iron trade, and there are several large foundries: printing, brewing, and comb making are also extensively carried on. The glass manufacture was established at York at a somewhat early period; and phials and flint glass wares are still made here. Linen cloth, sackings, twine, leather, gloves, jewellery, paper-hangings, fringe, musical instruments, brass wares, and tobacco pipes, are among the other goods made at York. Many guilds or trading companies formerly existed, but all of them except three appear to be dissolved. The Company of Merchant Adventurers of York is an ancient corporation by prescription, now consisting of about 120 members, under a governor and deputy-governor, having property yielding 200*l.* a year, with a chapel and hall and a hospital in Fossgate. The Merchant Tailors' Company, incorporated by charter 14 Chas. II., consists of from 30 to 35 members, with exclusive privileges in the city, and an income of 136*l.* a year. The other company is the Goldsmiths', authorised by act of parliament. The Ouse trustees have lately spent large sums on the improvement of the river navigation; and steamers now ply to and from Hull at all times of the tide. Coals are brought to the town by water and by railway. A decided increase of trade has been experienced since the completion of the railways, by which York communicates with Newcastle, Durham, and Carlisle northward, and with Leeds, Hull, the Liverpool lines, and other parts to the S. The York station of these railways is an elegant building, immediately within the walls near Micklegate. Large sales of cattle and horses take place at fairs held here once a fortnight, besides which there are monthly fairs for leather; many others in the year for flax and wool. Markets, Tuesdays and Saturdays; the latter chiefly for corn. A new cattle market was opened in 1828 outside Fishergate. Races, which are extremely well attended, are held three times a year on Knavesmire, a large plain about 1 m. S. from the city, where is a spacious grand stand.

Antiquities and History.—York, though successively the residence of Hadrian, Severus, Geta and Caracalla, Constantius Chlorus, and Constantine the Great, has few striking Roman antiquities. Such as do exist comprise a remarkable multangular tower, a long wall, with altars, *patera*, tombs, monuments, and the foundations of ancient buildings. The *palatium* of the Roman emperors is supposed to have occupied several acres near the cathedral, extending from Christ Church through all the space between Goodramgate and St. Andrewgate to Aldwark. Not far from this, in St. Cuthbert's cemetery, many Roman sepulchral remains have been found. Outside Micklegate-bar, a Roman vault, with a perfect skeleton, was opened in 1807; and a tessellated pavement was discovered within the same bar in 1814. Severus died at York A. D. 212; and his funeral obsequies would appear to have been performed on some heights a little W. of the city, still called Severus' hills. Constantius, who died in 307, is traditionally said to have been buried in the par. church of St. Helen's. Under the Saxons, York was successively the capital of the kingdoms of Northumberland and Deira. It was taken and its neighbourhood devastated by William the Conqueror in 1069. Several parliaments have been held in York, the first being that summoned by Henry II. in 1160. In 1540, Hen. VIII. established in this city an officer called the Lord President of the North, and a council with very extensive powers, which existed till the civil wars, when York was frequently a principal station and residence of Charles I.; it, however, surrendered to the parliament in 1644.

YORK, a town of the U. States, Pennsylvania, cap. co. York, on a creek flowing into Chesapeake Bay, and on the railroad between Harrisburgh and Baltimore, 40 m. N. by W. the latter. Pop. 6,868 in 1860. York is an agreeable and flourishing town, in a rich, agricultural district. It is constructed mostly of brick, and has some good buildings, including numerous churches, an episcopal academy, court, market, and almshouses. Its trade is chiefly in agricultural produce.

YOUGHALL, a parl. bor. and sea-port town of Ireland, prov. Munster, co. Cork, on the W. side of the estuary of the Blackwater, immediately within its mouth, 27 m. E. by N. Cork, with which it is connected by railway. Pop. 6,328 in 1861. The town is built close to the water's edge, along the foot of a steep hill, and consists principally of a main street, extending for about 1 m. parallel to the strand, and of various other smaller streets and lanes. It was formerly surrounded by walls; and these in part remain, and form, on the summit of the hill to the W., the boundary of the town. The principal public building is the parish church, a large Gothic edifice: in its immediate vicinity are the ruins of an old abbey, one of the windows of which is extremely beautiful, and quite entire. The churchyard is interspersed with lime and other trees; and, like everything else about Youghall, has many remnants of antiquity, old tombs, old ivied, moss-grown stones, and luxuriant weeds. The town has also a chapel of ease, several Roman Catholic chapels, and meeting-houses for various classes of dissenters, an infirmary, a dispensary, a barrack for infantry, numerous public schools, a convent, the college, now in a neglected state, the property of the duke of Devonshire, a court-house, custom-house, fever and lying-in hospitals. The house occupied by Sir Walter Raleigh is still preserved in good repair, and with but little change. Youghall sent 2 mems. to the Irish H. of C.; and

it has sent 1 mem. to the Imperial H. of C. from the era of the Union downwards. Registered electors 237 in 1865. Under the Irish Municipal Reform Act, 3 & 4 Victoria, cap. 108, the corporation is extinct, and the corporate property has been vested in commissioners.

The manufactures of the town are inconsiderable, consisting only of small potteries and brickworks. It is too near Cork to have much foreign trade; but owing to its situation on a fine navigable river, it is the emporium of a considerable tract of country. The great articles of export consist of grain and meal, provisions, cattle, and pigs. The principal articles of import are timber and coal. The bar at the river's mouth has only 4 ft. water at ebb tide, and it is inaccessible for vessels drawing more than 12 or 13 ft. water, except at high springs. Youghall is included in the port of Cork, but its shipping is inconsiderable. The beach is fine, and the town is well fitted for sea-bathing; though, in this respect, but little advantage has been taken of its capabilities. It is believed, apparently on good grounds, that the introduction of the potato cultivation in Ireland dates from 1610, when Sir Walter Raleigh sent a few to be planted on his estate in the vicinity of this town.

YPRES (Flem. *Ypern*), a fortified town of Belgium, prov. W. Flanders, cap. arrond. and two cants., on the Yperlee, 29 m. SW. Bruges, and 16 m. NNE. Lille, on the railway from Brussels to Dunkerque. Pop. 16,709 in 1860. In the 14th century Ypres is said to have been nearly equal in pop. and importance to Bruges. It is well built, and like most towns in Flanders, it has extensive water communications, being connected by canals with Nieuport, and Bruges. The courthouse and cloth-hall occupy a vast Gothic building of the 14th century, surmounted by a fine tower. The cathedral, a Gothic edifice, has a painting attributed to Van Eyck; and the tomb of Jansen, bishop of Ypres, and founder of the sect of Jansenists in the 17th century. There are several other churches and chapels, 4 hospitals, an exchange, and a royal college. Ypres was formerly famous for its manufactures of woollen and linen cloths, and the fabric called *diaper* (originally *d'Ypres*) derives its name from having been originally made in this town. Linen yarn and lace are now the principal articles manufactured; but there are still some woollen and linen cloth factories at Ypres, with tanneries, bleaching and dyeing-houses, one or more salt-refineries. Ypres experienced many reverses in the wars of the 17th and 18th centuries. Under the French it was the cap. dép. Lys.

YRIEX (ST.), a town of France, dép. Haute-Vienne, cap. arrond., on the Loue, a tributary of the Isle, 21 m. SSW. Limoges, on the railway from Limoges to Bordeaux. Pop. 7,613 in 1861. The town owes its origin to a monastery founded here in the 6th century; and is old and ill built. It has a collegiate church, a curious Gothic edifice of the 12th century, 4 other par. churches, an hospital, a court of primary jurisdiction, and a society of agriculture, with manufactures of woollen stuffs, linen yarn, and porcelain, and 12 annual fairs. Here are some iron works, and works for the preparation of antimony: all the porcelain clay used in the china-manufactory of Sèvres comes from St. Yriex.

YSSENGEAUX, a town of France, dép. Haute-Loire, cap. arrond., on a rocky and elevated site, 14 m. NE. Le Puy. Pop. 7,971 in 1861. Though irregularly built, and *assez triste*, it has a good modern church, and is improving. It has no manufactures worthy of notice, its inhabs. being

principally engaged in agriculture and cattle-dealing.

YUCATAN, the most E. prov. of the Mexican empire, consisting of a peninsula, projecting northwards, between the Caribbean Sea on the E., and the Gulf of Mexico on the W., and between the 18th and 21st degs. of N. lat., and the 87th and 91st of W. long., having S. the provs. of Tabasco, Chiapa, Vera Paz, and the British territ. of Honduras; length N. and S., about 250 m.; average breadth, 200 m. Area, 79,500 sq. m. Pop. 668,623 in 1857. Yucatan is one of the poorest districts of Mexico. On parts of it, maize, cotton, rice, tobacco, pepper, and the sugar-cane, are produced. But the scarcity of water in the central parts of the peninsula, where not a stream of any kind is known to exist, and the uncertainty of the rainy season, render the crops very variable; and years frequently occur in which the poorer classes are driven to seek a subsistence by collecting roots in the woods, when a great mortality ensues, in consequence of their exposure to a very deleterious climate. Yucatan has no mines. An active intercourse was formerly carried on with the Havannah, which Yucatan supplied with Campeachy wood, salt, hides, deer skins, salted meat, and the *jenequen*, a plant from which a sort of coarse thread was made, and wrought up into sacking, cordage, and hammocks. This trade was cut short by the war; and as few foreigners have been induced to settle in Yucatan, the inhabs. have derived but little advantage from the late change of institutions. The chief towns are Merida, the cap., Valladolid, Bacalar, Campeachy, and Vittoria; but none of much importance.

YVERDUN (Germ. *Iferten*, an. *Ebrodunum*), a town of Switzerland, cant. Vaud, cap. distr., on the Thiele, at its mouth in the S. extremity of the lake of Neufchatel, 17 m. N. by W. Lausanne,

on the railway from Neufchatel to Lausanne, Pop. 4,986 in 1860. The town is well built, consisting of three principal streets, with a handsome square, a new church, and town-hall, with several bridges across the Thiele. Its principal edifice is a castle, built in the 12th century, and which, from 1805 to 1825, served for Pestalozzi's central school, conducted by himself. Yverdun has a college, a public library, with a museum of antiquities, and a tolerable harbour on the Thiele. Its trade is brisk, it being the great depôt for the wine of the cant. exported northward.

YVETOT, a town of France, dép. Seine-Inférieure, cap. arrond., on the railway between Havre and Rouen, 20 m. NW. the latter. Pop. 8,921 in 1861. The town stands on a bare and arid hill, destitute of any running water, the inhabs. being supplied from wells. It consists chiefly of one long street; but this has few good houses, and the rest of the town is very meanly built. It has, however, a planted promenade; and the surrounding country is fertile and populous. Yvetot is the seat of courts of primary jurisdiction and commerce, a chamber of manufactures, and has manufactures of linen and cotton cloths, cotton velvet, handkerchiefs, hosiery, cutlery, and hardware. It has also a considerable trade in corn and sheep.

Towards the end of the 18th century, the Spanish, Italian, and other merchants used to proceed from Harfleur to Yvetot, where they conducted their chief mercantile transactions with the French; and, perhaps in the view of encouraging commerce, the fief of Yvetot was declared, in 1370, free of all feudal service to the French crown. Its lords soon afterwards coined their own money, and assumed the title of *king*. The exploits of one of these petty monarchs form the subject of one of Beranger's charming songs.

Z.

ZAANDAM, improperly **SAARDAM**, a town of N. Holland, on the Zaan, a tributary of the Y, by which it is divided into E. and W. Zaandam, 4½ m. NW. Amsterdam. Pop. 11,778 in 1861. The town is excessively trim, quiet, and minutely clean. The streets are paved with clinkers, and daily washed; the houses are built of wood and painted white and green, and their principal door, that of ceremony, is only opened at baptisms, marriages, and funerals. The dock-yard, in which 300 vessels were formerly built and repaired annually, have disappeared; its herring and whale fisheries have also vanished; but its vast number of windmills employed in sawing timber appear, with their dependent operations, to give full operation to the inhabs.

At one period, Zaandam ranked among the greatest naval arsenals in Europe; but the principal celebrity of the arsenal, and, indeed, of the town, is derived from the circumstance of Peter the Great having wrought in it as an ordinary ship carpenter during his visit to Holland in 1697. The hut which he occupied is still kept up, and has been visited by numerous distinguished personages, including Napoleon I., and Alexander, emperor of Russia.

ZACATECAS, a city of Mexico, cap. of the prov. of its own name; in a narrow valley, 290 m. NW. Mexico. Pop. 24,300 in 1857. At a distance, its numerous churches and convents give the town a fine appearance, and it has many excellent houses; but its streets are narrow and

filthy. Its markets appear to be abundantly supplied with fish, fruits, vegetables, &c. Gunpowder and some cotton fabrics are manufactured here; and Zacatecas is next to Guanajuato, the principal mining city, and one of the chief mints in Mexico. In the latter establishment 300 people are constantly employed. The prov. Zacatecas is one of the richest mining provinces in America. As a mining district, it differs materially from Guanajuato, for in lieu of one great mother vein, it has three lodes nearly equal in importance, with many inferior lodes; upon all which nearly 3,000 pits or shafts have been opened. N. and E. of Zacatecas, the country is divided into vast breeding estates, and is very thinly peopled. The state has no manufactures, except those of the cap. and a few in Aguas Calientes; the pop. living by mining and rural industry.

ZAFRA (an. *Segeda*), a town of Spain, in Estremadura, prov. Badajoz, 40 m. SE. Badajoz, on the railway between it and Seville. Pop. 5,965 in 1857. The town is regularly built, and has two squares surrounded with arcades, and many houses of a superior class. Among the latter is the magnificent residence of the dukes of Medina Celi. The collegiate church is also a fine edifice, and several other churches are richly adorned. This town had formerly manufactures of gloves and jewellery; but these have decayed, and earthenware and leather are now the principal articles made at Zafra. It was taken from the Moors by Ferdinand III. in 1210.

ZAMORA, a city of Spain, in Leon, cap. prov. of its own name, near the confines of Portugal, on the Douro, here crossed by an ancient stone bridge, 34 m. NNW. Salamanca, on the railway from Madrid to Vigo. Pop. 9,531 in 1857. Its fortifications are of considerable extent, and enclose upwards of 20 churches, 16 convents, 3 hospitals, infantry and cavalry barracks, a court-house, public granary, and bishop's palace. Without the walls are the remains of an ancient castle. The inhabitants manufacture hats, serges, leather, liqueurs, and gunpowder, and have several dyeing-houses. The city, which is supposed to have been the ancient *Seutica*, derives its modern name from the turquoises found in its vicinity, for which *Zamora* is the Moorish term. Alphonso the Catholic took it from the Moors in 748, but it was retaken by the latter in 985. Ferdinand the Great finally annexed it to Castile in 1093, and it was the seat of the Cortes in 1297 and 1302.

ZANESVILLE, a town of the U. States, in Ohio, cap. co. Muskingum, on the Muskingum river, 48 m. E. Columbus. Pop. 12,751 in 1860. The falls in the river here have made Zanesville the seat of many flour, paper, and saw mills, some iron-foundries, and cotton-factories. It has an atheneum, and several other schools. Two bridges connect with the town with the village of Putnam opposite; and it has water communication with both New York and New Orleans; from either of which steam-boats ascend to Zanesville.

ZANTE (an. *Zacynthus*), one of the Ionian Islands (which see), of which it is the third in point of magnitude and importance, about 10 m. off the W. coast of the Morea, its cap. being in lat. 37° 47' 17" N., long. 20° 51' 32" E. It is of a somewhat oblong shape; greatest length NW. to SE. about 20 m.; greatest breadth, 10 m. Area, 161 sq. m.; pop. 39,693 in 1861. The island is mostly mountainous, particularly its W. portion, where several summits rise to the height of 1,300 ft.; but on the E. side, behind the town of Zante, is an extensive and fertile vale, so covered with currant bushes (*Vitis Corinthiaca*), olive trees, and cypresses, as to entitle the island now, as of old, to the epithet of 'woody.'

'Jam medio apparet fluctu nemorosa Zacynthos.'
Æneid, iii. 270.

About 9,000,000 lb. of currants are annually produced in this fertile vale. They are accounted better than those of Cephalonia, but inferior to those of the Morea. They are gathered in Aug., and spread out to dry for three weeks; and for this purpose a plot of ground is levelled and kept dry before every house in the valley. Much depends upon the process of drying: a shower of rain will sometimes diminish the value of the article by one third, and a second entirely ruin the crop. The learned traveller, Dr. Chandler, has given the following details with respect to the treatment of currants, which may be worth quoting (Travels in Greece, cap. 79):—'When dried by the sun and air, they are transported to the city on horses and mules, guarded by armed peasants; and poured down a hole into magazines, where they cake together. When about to be shipped, the fruit is dug up with iron crows, and stamped into casks by men with bare legs and feet. In the ships it sweats, and, as we experienced, often fills the vessel with a stench scarcely tolerable. The islanders believe it is purchased to be used in dyeing, and in general are ignorant of the many dishes of which currants are an ingredient.' The honey, oil, and wine of the island are much esteemed; of the latter no fewer than 40 different sorts are said to be made. Oranges,

lemons, and citrons are also exported, and about 40,000 barrels of salt are annually produced from the salt works of the island. The pitch wells, visited and described by Herodotus (iv. 195), are situated towards the S. extremity of the island, in a small plain, open on one side to the sea, but elsewhere circumscribed by hill ranges. It is, partly at least, of volcanic formation, and occasionally suffers from earthquakes, one of which, in 1840 (Oct. 30) committed the most extensive ravages. In the wells, a dark substance is continually forcing itself from the bottom through the water, boiling up in large globules, which burst when they come to the surface. The pitch is collected with large spoon-like implements: the average annual produce is about 100 barrels, used for smearing ships' bottoms.

The town of Zante, on the E. shore of the island, is the largest in the Ionian islands, having about 20,000 inhabs. It stands partly on the level shore, and partly on some acclivities, one of which is crowned by its citadel, anciently called *Psophis*, founded by the Arcadian Zacynthus. The town, which is well kept and clean, is supplied with water by an aqueduct constructed by the British government. The reflection of the sun renders it extremely hot in summer, though the heat is a good deal moderated by the action of the sea-breeze, which blows during the day. The harbour is capacious, and protected from NE. winds by a mole, at the extremity of which a lighthouse is erected. Ships anchor opposite the town, at from 500 to 1,000 yards distance, in from 12 to 15 fathoms water. Zante is the see of a Greek protopapas, and of a Rom. Cath. bishop, and has numerous churches, two synagogues, a lazaretto, and a lyceum; with some manufactures of linen, cotton, and woollen stuffs, liqueurs, soap, and jewellery. This town suffered severely from the earthquake already alluded to.

At the time of the Peloponnesian war, Zacynthus belonged to Athens: it was at an after period alternately a possession of the Macedonians and the Romans. Several curious antiquities have been discovered in the island, and it has been supposed that the remains of Cicero were deposited in a tomb discovered here in 1544.

ZANZIBAR, a small island on the E. coast of Africa, opposite to Zanguebar, from which it is distant only about 20 m. the town of the same name, on its W. side, being in lat. 6° 3' 15" S., long. 39° 10' E. It is about 45 m. in length from N. to S. by about 15 m. in breadth. Pop. estim. at 250,000. The W. coast is low, and in parts marshy; but the coast is bold and well wooded. There are numerous harbours between the island and the mainland, formed by smaller islands and reefs, which are safe and not difficult of access. The anchorage opposite to the town is at once secure and capacious. The island is well watered, producing considerable quantities of excellent sugar, with rice and other grains; and provisions and fruits of all sorts are abundant and cheap. Though the hills in the interior are not sufficiently high to interrupt the course of the sea breeze, the island is but indifferently healthy, at least to Europeans. The inhabs. are mostly of Arab extraction, and profess the Mahommedan religion. The island belongs to the Imaum of Muscat, who occasionally resides upon it. The town is built in the Arabian style, and is defended by a castle, which, however, is of little strength.

Zanzibar is the centre of a considerable commerce, with the opposite coast of the continent, Madagascar, India, and Arabia. The exports comprise gums, ivory, antimony, blue vitriol, cocoa-nut oil, hides, horns, and sugar. Formerly

slaves were a principal article of export. Fancy shells are also exported, and the shell known in commerce by the name of the *bull-mouth*, having been used in the manufacture of imitation cameos, was extensively imported into Great Britain while these articles were in fashion; but since the demand for them has fallen off, the value of the shell and the quantity imported have proportionally declined. The imports comprise arms, gunpowder, cutlery, coarse cotton stuffs, beads, wire, and iron. Small vessels of about 200 tons burden, called dows, are built on the island.

ZARA (an. *Jadera*), the cap. of Dalmatia, circ. of same name on the Adriatic, opposite the island Ugliano, 150 m. SE. Venice. Pop. 8,245 in 1858. The town stands on a small peninsula, and is fortified with bastioned walls and several outworks. It has many good private dwellings, but its streets are narrow and ill-drained, and it suffers from a deficiency of water. It has a cathedral and several other churches, 10 convents, a naval and military arsenal, and a theatre; with a lyceum, gymnasium, episcopal seminary, many inferior schools, and a museum of antiquities. Its harbour is spacious, but exposed to N. winds, which sometimes blow with tremendous violence. The coasting trade and fisheries employ most part of the inhabs., and a great number of vessels are owned in the port. The manufacture of *rosoglio* is almost the only other branch of industry carried on, and that at present to a very limited extent. Zara is an archbishop's see, the residence of a general commandant, and the seat of all the superior provincial courts of Dalmatia. Without its walls are the remains of an ancient aqueduct; but, with this exception, few other Roman antiquities exist in Zara, in consequence of their having been mostly employed in the building of the fortifications.

ZEALAND, the largest and most important of the Danish islands, being that on which Copenhagen is situated. It lies mostly between the 55th and 56th degs. of N. lat., and long. 11° and 12° 40' E., at the entrance of the Baltic, being separated from Sweden by the Sound, and from Funen and Langeland by the Great Belt. Area, 2,830 sq. m. Pop. 560,510 in 1860. Like the rest of the Danish islands, it is flat, or at most gently undulating, and is in parts intersected by canals. The climate is mild, and similar to that of the S. of Scotland. It is well cultivated, and is exceedingly fertile, producing grain of all sorts, especially rye, barley, oats, and wheat. The pastures are excellent, and the island is celebrated for its breed of horses. It is also well stocked with cattle and sheep. Wood is plentiful, except in the middle of the island, where turf is used for fuel. It is studded with cottages, farms, and country-houses; bearing a greater resemblance to England than is exhibited by most continental districts. It is also the principal seat of the manufactures and trade of Denmark. It is subdivided into 5 bailiwicks, and is governed by a grand-bailiff; it forms, of itself, a separate ecclesiastical superintendency.

ZEALAND (NEW), a range of three principal and some smaller islands in the S. Pacific Ocean, belonging to the Australasian group, and forming a British colony. The range extends in a curved line, between 35° and 47° S. lat., and 166° and 179° E. long., about 19° E. of Australia and Van Diemen's Land, being the land nearest to the antipodes of Great Britain. The principal islands are, from their position, called the North, the Middle, and the South, or Stewart's Island. The first two, which are by far the largest, are separated by the narrow channel called Cook's Strait, in about the 41st deg. of S.

lat.; the southern being separated from the middle island by a similar strait, in about the 47th deg. S. lat. The length of the curved line extending through the three islands, from the N. to the S. Cape, is about 900 m., the two largest being of great length as compared with their breadth. The area of the country is estimated at 122,000 square miles, or nearly 80 million acres, two-thirds of which are fitted for agriculture and grazing. The North Island contains about 31, and the Middle Island about 46,000,000 acres. Stewart's Island, uninhabited—and, as many think, uninhabitable—contains about 1,000,000 acres.

The population of New Zealand, according to the census of Dec., 1861, is given in the following table:—

| Provinces | Males | Females | Total |
|-------------------|--------|---------|---------|
| Auckland . . . | 13,494 | 10,926 | 24,420 |
| Taranaki . . . | 1,169 | 875 | 2,044 |
| Wellington . . . | 6,626 | 5,940 | 12,566 |
| Hawke's Bay . . . | 1,667 | 944 | 2,611 |
| Nelson . . . | 5,337 | 4,615 | 9,952 |
| Marlborough . . . | 1,503 | 796 | 2,299 |
| Canterbury . . . | 8,939 | 7,101 | 16,040 |
| Otago . . . | 27,161 | 6,002 | 30,163 |
| Southland . . . | 1,107 | 718 | 1,820 |
| Total . . . | 64,062 | 37,912 | 101,915 |

The estimated total population of New Zealand, calculated after the returns of the Registrar-General, amounted to 125,812, on the 1st of January, 1863, of which number there were 79,680 males and 46,132 females. The British troops stationed in the colony and their families were not included in these returns. The increase of population in 3 years had been nearly 72 per cent.

New Zealand, like the majority of the S. Sea Islands, is of volcanic origin. A chain of lofty mountains occupies the centre of the Middle Island through its whole length, extending also through more than half the length of the N. Island. The mountains on both sides slope gradually towards the sea, leaving on both sides a large extent of shelving forest, plain, and marsh lands. Here and there along the line of the Cordillera several high summits, overtopping the rest, rise into the region of perpetual snow. There are likewise several subordinate ranges of hills, and some detached outlying mountains of large dimensions. A few of the mountains are barren, or clothed with fern; but by far the greater number are covered, up to the range of perpetual snow, by magnificent timber trees. There are some pretty extensive plateaus, or tracts of table land. The country is extremely well watered: a great number of streams, affording an unlimited command of water power, descend from the central chain on both sides. Few of the larger rivers have been surveyed to any great distance, but the Waikato and others are of considerable size and length. There are numerous lakes. The shores are in parts iron-bound and dangerous; but all the islands, and more particularly the N., have many excellent bays and harbours.

Among the mineral productions are gold, copper, iron, and coal. The gold-diggings are in Auckland, Nelson, and Otago. Those of Auckland are not very productive. The Nelson diggings yield gold to the value of 2,000*l.* a week. Mineral stores of immense extent are believed to be in existence not far below the soil in various parts of New Zealand. The total quantity of gold exported from New Zealand from April 1, 1857, to September 30, 1863, amounted to 1,130,763 *oz.*

of the value £ 4,377,708*l*. Coal has been found and wrought to some extent at Nelson, New Plymouth, and at other points in both the larger islands. Iron ore is abundant, which also is affirmed to be the case with copper, manganese, and other metals; and pumice-stone, sulphur, whinstone, limestone, slate, marble, fullers' earth, and clay for brick-burning are met with in the greatest profusion. There are some active volcanoes: and in the N. Island are various cavities, which appear to be extinct craters, in the vicinity of which numerous hot springs are met with: some of these, as they rise to the boiling point, are used by the natives for cooking. Mount Egmont, an extinct volcano, in the SW. portion of the Northern Island, near the N. entrance to Cook's Straits, is said to be 8,840 feet in height.

The climate is temperate, bearing a considerable analogy to that of France and the S. of England. The country is free from the oppressive heats that prevail at mid-day in Sydney; and, what is of greater importance, it is not subject to the long-continued droughts that afflict the Australian continent. But it is subject to severe storms and hurricanes. Strong winds, principally from the NE. or SW., always occur at changes of the moon, frequently bringing rain, particularly in the winter months. In the interior, the weather is colder, but more equable than on the coast. The climate appears to be generally salubrious, and favourable to longevity; the prevalent diseases are mostly those which have been introduced by Europeans, though in some situations the natives suffer from scrofulous and glandular affections.

The following comparison has been made between the climate of London and that of Wellington, nearly in the centre of the group:—

| | London | Wellington |
|--|--------|------------|
| Mean Annual Temperature | 50.39 | 52.50 |
| Mean of Winter | 39.12 | 46.83 |
| Mean of Coldest Month | 37.36 | 44.05 |
| Mean of Hottest Month | 63.43 | 64.25 |
| Average Number of Days on which Rain falls | 178 | 128 |
| Mean Annual Quantity of Rain in Inches | 24.80 | 28.73 |

The country presents the aspect of perpetual vegetation, most of its indigenous vegetable products being evergreens; and the soil, which, in most of the valleys hitherto explored, is a deep loam, or vegetable mould of great fertility, is well adapted to the growth of nearly all the useful vegetables of Europe. New Zealand has neither a tropical climate, nor is it a land in which edible vegetables and fruits, indigenous to such regions, grow and flourish spontaneously and abundantly; and it has no native animals adapted for the food of man, and easily obtainable by the chase. The islands are, at present, in great measure, uncultivated wastes, consisting of mountains covered with dense forests, of plains and undulating grounds, sometimes heavily timbered, and sometimes overrun with fern and scrub, and of swamps and marshes, covered with rushes and flax; but it has comparatively few open spaces of grass-land for tillage or pasturage, or of downs and hills for sheep. In many vast tracts there are no living animals, wild or domestic, to be seen; and whatever is produced for the food of the pop., whether of grain from arable land, or of stock from pasture, or of fish from the sea, must be the result of considerable labour, care, and expense.

When once cleared, the soil is generally of a superior description, and suitable to all sorts of husbandry practised in Britain. The dry, alluvial,

and heavily timbered tracts are the most fertile; and the swampy tracts, especially if they be covered with flax, are also, when drained, extremely productive. The dry upland grounds, if they be well covered with luxuriant fern and scrub, are said to be, in most localities, of a fair average fertility; but where the fern is short and stunted, the soil is decidedly inferior. Where the sides of the mountains are well wooded the soil is generally good; but, except where the slopes are formed into terraces, it is apt to be washed down on the trees being felled and their roots rotted. The soil of the purely volcanic districts depends on the extent to which the surface matter is decomposed; in some parts it is very fertile.

Grain of all kinds, fruits, and vegetables grow luxuriantly. Potatoes, originally introduced by Captain Cook, now form the principal food of the natives. Two crops are annually obtained from the same ground. The subjoined table shows the extent of land under crop, in the possession of Europeans, at the commencement of 1861.

| Description of Crop | | | | Land under Crop |
|-----------------------------|---|---|---|-----------------|
| | | | | Acres |
| Wheat | . | . | . | 13,700 |
| Barley | . | . | . | 3,017 |
| Oats | . | . | . | 12,496 |
| Maize | . | . | . | 358 |
| Potatoes | . | . | . | 5,574 |
| Sown Grass | . | . | . | 98,061 |
| Garden or Orchard | . | . | . | 8,982 |
| Other Crops | . | . | . | 3,864 |
| Total | | | | 141,007 |
| { Cultivated | | | | 295,561 |
| { Fenced | | | | |

Timber, of which the supply is all but inexhaustible, has already become, and, no doubt, will continue to be, an important article of export to Sydney and other places. The trees, which are principally of the pine species, sometimes attain to an extraordinary size. A tree, of the variety called *knary* pine, cut and shipped recently, measured 150 ft. in length, and 25 ft. in circ. at the base. A species of gum exudes copiously from the stumps of these trees when cut down. It hardens in the air, and being collected by the natives is exported as an article of merchandise. This tree is only found in perfection in the N. parts of the N. island, and the ground on which it grows is quite unsuitable for cultivation. The *kahikatea*, or white gum, and other varieties, are found in the greatest perfection in the middle and southern islands. There are great many woods suitable for furniture and fancy work. Some of these are finely grained, and may probably bear the cost of a voyage to England.

Flax is one of the principal products of the colony. It is obtained from the leaves and not from the stem of the *Phormium tenax*, an indigenous plant, found in the greatest abundance in the marshes of the larger islands. The best varieties are distinguished by the length, toughness, and flexibility of the fibre. Much difference of opinion has, however, prevailed in regard to its quality, and the imports into England have not sold well; but this has been ascribed partly to an inferior variety having been exported, and partly to its defective preparation, which was, at first, wholly intrusted to the native women. The *tihore*, or silky variety, is said to be very superior, and its preparation and manufacture are beginning to engross a larger share of the attention of the colonists.

Except a few cattle and sheep in the possession of the missionaries, and a small number of goats,

no kind of live stock existed in New Zealand, down to a very late epoch, except pigs. These, which were introduced by Captain Cook, have, from the great abundance of fern roots, their favourite food, multiplied exceedingly. They have been allowed to run wild by the natives, who catch them by means of dogs. The number of each kind of live stock, in the possession of Europeans, in 1860 and 1861, is shown in the following table:—

| | 1860 | 1861 |
|---------------------------|-----------|-----------|
| Horses | 10,589 | 14,912 |
| Cattle | 106,502 | 137,204 |
| Sheep | 1,051,374 | 1,523,324 |
| Swine | 40,318 | 40,734 |
| Goats | 10,089 | 11,797 |
| Mules and Asses | 104 | 122 |

It is remarkable that when New Zealand was first discovered, it had no indigenous mammalia whatever; indeed, its only quadrupeds were a few species of lizards, which the inhabs. held in veneration or terror. Horses, cattle, sheep, and other useful animals, have all been imported: even the dog and the rat have been introduced by Europeans. A good many parrots, parroquets, wild ducks, pigeons of large size and fine flavour, inhabit the forests; and poultry are found to thrive very well, though not yet reared to any great extent. Indeed, almost the only animal food used by the New Zealanders, previously to the settlement of the English, was the fish, which abound round the coasts.

The soil and climate are well suited to the growth of cattle, sheep, and other useful animals. The wool of New Zealand is of a very good quality, and the exports of it are progressively increasing, though the want of down lands and of open spaces for their pasture makes the increase of sheep less rapid than in Australia. The weight of the fleece is greater here than in N.S. Wales and the contiguous settlements. The depasturing by sheep is said to improve the quality of the runs, the fern disappearing, and fine grass springing up in its stead. Cattle attain to a large size, and thrive extremely well. The seas and bays round New Zealand are stocked with a great variety of excellent fish, and the country is extremely well situated for the successful prosecution of the S. whale-fishery. This branch of industry is carried on to a considerable extent, and whale-oil and whale-bone make prominent articles in the list of exports. The colony appears to possess every facility for the building of ships.

The natives, who are called Maorians, probably belong to the Malay family, and, if so, are by far its best specimens. In general the men are tall, many individuals of the upper classes reaching the height of six feet and upwards. They are strong, active, and almost uniformly well-shaped. Generally speaking, the forehead is retreating and narrow, though rather wide at the base. Hair commonly straight, but sometimes curly, particularly that of the women, who are frequently handsome. Colour resembles that of a European gipsy, but varies in individuals from a dark chestnut to the light tinge of an English brunette. Eyes dark, deeply sunk and full of vivacity; the teeth, which are white, even, and regular, last to old age; the features, though prominent, are regular; their physiognomy bears no sign of ferocity, but is easy, open, and pleasing. They make excellent seamen, in which capacity they are extensively known. Except occasional cannibalism and infanticide (both of which have greatly decreased of

late years), they manifest fewer of the vices of savages than almost any other savage people. Their manufactures, when first discovered, were but few, and mostly confined to the furniture of their huts, articles of dress, weapons, and other necessities. But they prepared mats and other articles in flax of great beauty, and evinced much ingenuity in carving and building canoes. They have an abundance of poetry of a lyrical kind, in a metre which appears to be regulated by a regard to quantity, and are passionately fond of music. They have also a kind of astronomy, and, according to baron Hügel, there is not a tree or even a weed, a fish or a bird, in the N. island, for which the natives have not a name universally known. Unlike most other savages, they have evinced the greatest aptitude for acquiring the arts, and the greatest desire to participate in the advantages of civilised life. A considerable proportion of the natives are slaves to others, who are themselves dependent, to some extent, on certain arekees, or head chiefs; but the holders of slaves appear, notwithstanding, to have independent control over their own lands, and to dispose of them at will, without the consent of the arekee. Polygamy is practised by such of the New Zealanders as continue attached to their ancient superstition; but the missionaries, who have establishments in many parts of the islands, have, according to their own account, been eminently successful in converting them to Christianity. Schools also have been established in which the natives are instructed in the English language. The total number of aborigines, in each province and district, according to the returns of a census taken between September 1857, and September 1858, was as follows:—

| Provinces | Males | Females |
|--------------------------------------|--------|---------|
| Auckland | 21,630 | 16,560 |
| Taranaki (New Plymouth) | 1,751 | 1,284 |
| Wellington | 4,539 | 3,540 |
| Hawkes Bay | 2,044 | 1,629 |
| Nelson | 692 | 428 |
| Canterbury | 349 | 289 |
| Otago | 285 | 240 |
| Districts:— | | |
| Stewart's Island & Ruapuke | 110 | 90 |
| Chatham Islands | 247 | 263 |
| Total | 31,667 | 24,303 |

After having made remarkable progress in all the arts of civilization, and, unfortunately, acquired also the art of using guns and gunpowder, the natives engaged in sanguinary warfare with the European settlers at the beginning of 1863, and the struggle kept raging, with more or less intermission, all through the years 1863, 1864, and 1865.

New Zealand was discovered by Tasman in 1642, but its extent and character were not ascertained till the voyages of Cook in 1769 and 1774. From that period, the coasts were occasionally visited by whalers, and some communication was held with the natives; but no permanent settlement appears to have been made by any people till about 1815, when a missionary station was established in the Bay of Islands, towards the N. extremity of the N. island. Though the right of Great Britain to these islands was recognised at the general peace, no constituted authority was placed over New Zealand till 1833, when a resident, subordinate to the government of New South Wales, was sent hither, but with very limited powers. Meantime the shores had become infested by marauding traders, run-away convicts,

and other unscrupulous characters, who introduced a taste for ardent spirits, various diseases, and much demoralisation. These persons also swindled, or attempted to swindle, the natives out of large tracts of land, by getting them to subscribe contracts, of the real import of which they certainly knew little or nothing, by which entire districts were conveyed away for the merest trifle. Under these circumstances, it became necessary to establish a government sufficiently strong to protect the aborigines and the real interests of the colonists. Accordingly in Jan. 1840, New Zealand was constituted a colony, and a governor appointed, who immediately proclaimed, among other announcements, that all purchases of land would, in future, be void unless conducted through the British local government. But shortly before the formal occupation of these islands, the mania for speculating in land attained to an enormous extent; and vast tracts, equal, in fact, to provinces, were acquired by a few individuals, belonging to the islands, to Sydney, and other parts. It was not, therefore, enough to prevent such wholesale acquisitions in future. Justice to the natives, on the one hand, and the best interests of the colony on the other, made it imperatively necessary that the grounds on which the claims to land were made should be carefully inquired into; that in all cases in which the natives had been swindled the grants should be cancelled; and that, when confirmed, their extent should be limited. In consequence of these considerations, a commission was appointed to inquire into the validity of all claims to land; and the commissioners were instructed to recognise those only which were founded on fair and equitable considerations, with the important proviso, that no claim for land, when affirmed, should be allowed to a greater extent than 2,560 acres.

The N. Zealand Company, established in 1841, for the promotion of colonisation in the islands, acquired in this view a right to extensive tracts of land. It had not, however, been long established till disputes began to arise between its directors and the government; and great difficulties were also experienced in adjusting the rival land claims of the crown, the natives, the colonists, and others. Hence the affairs of the islands were for a considerable period in the greatest confusion. The natives and the colonists went to war, and the real or alleged grievances of the N. Zealand Company engrossed a large share of the attention of parliament. For a time, however, these differences were adjusted, and it was not until the year 1863 that, as above stated, a new struggle, fiercer than any preceding one, broke out between the natives and the European settlers.

The present form of government for New Zealand was established by statute 15 & 16 Vict., cap. 72. By that Act the colony was divided into six provinces, since increased to nine—viz. Auckland, Taranaki, Wellington, Otago, Hawkes Bay, Marlborough, Nelson, Canterbury, and Southland—each governed by a superintendent and a provincial council, consisting of not less than 9 members. These members of council are chosen by the votes of the inhabitants of the different provinces, and the qualification for members and electors is possession in the district for which the vote is given of a freehold estate of the value of 50*l.*; or a leasehold estate of the annual value of 10*l.*, held upon a lease which at the time of registration has not less than three years to run; or being a householder within the district of the clear annual value of 10*l.*, or within the limits of a town of the clear annual value of 5*l.* Aliens are disqualified. Every council continues for four

years from the day of the return of the writs, unless dissolved by the governor. The superintendent and council of each province, with certain restrictions specified in the act, have the power of making such laws as may be required for peace and order. Such laws are, however, to be sent to the governor for his assent, and may be disallowed within three months after their receipt. No laws have any force until assented to by the governor. A general assembly, consisting of the governor, a legislative council, and a house of representatives, is also established by Act 15 & 16 Vict., cap. 72. Legislative councillors may hold their seats for life. Members for the house of representatives are elected by electors possessing the same qualifications as those who can vote for provincial councillors. An elector is also qualified to be a member. The house of representatives is to consist of 53 members—see 24 Vict., cap. 12—elected by 43 electoral districts.

The total revenue of the colony for the years 1856–62, and the expenditure for 1862—former years being unreported—are shown in the subjoined statement:—

| Years | Revenue | Expenditure |
|-------|-----------|-------------|
| | £ | £ |
| 1856 | 188,328 | |
| 1858 | 341,655 | |
| 1859 | 459,049 | |
| 1860 | 464,788 | |
| 1861 | 691,464 | |
| 1862 | 1,186,009 | 1,518,697 |

The control of native affairs, and the entire responsibility of dealing with questions of native government, were in 1863–64 transferred from the imperial to the colonial government.

The principal British settlements consist of Auckland, the cap., on the E. side of the N. island, on the S. side of Waitemata harbour, lat. 36° 51' 27" S., long. 174° 45' 20" E.; Wellington, the cap. of the S. prov., on the E. side of Port Nicholson, near the S. extremity of the N. island in Cook's Straits; New Plymouth, or Taranaki, on the E. coast of do.; Nelson, at the head of Tasman's Gulf, N. shore of the middle island; Akaroa, near the extremity of Banks's Peninsula, on the E. coast of do. A settlement established at Otago, on the S.E. coast of the middle island, is patronised by the Scotch Free Church; and a settlement entitled New Canterbury, has been founded under the patronage of the leaders of the established church. It may be doubted whether much judgment has been displayed in the selection of the majority of these sites. At Auckland there is no good landing place even for small vessels, and the water in-shore being shoal, ships load and unload with difficulty. It is stated by Mr. Southey (*Treatise on Colonial Wools*, p. 145), that a ship laden with coal, of which the inhab. were at the time in want, was obliged to leave the port from there being no chance of her being able to discharge her cargo within anything like a reasonable time. The town is also indifferently supplied with fresh water, and the country is bare of wood, and comparatively unproductive. Wellington is hemmed in by ranges of mountains which in great measure shut it out from all communication with the interior, though this disadvantage has been in part overcome by the carrying of good roads through the ranges in question. It is also frequently exposed to heavy gales of wind; and the water in-shore is so shallow as to hinder vessels of above 80 or 100 tons burden from reaching its wharfs. But despite these serious drawbacks, the town is said to be

in a thriving state. The situation of Nelson is also objectionable, being built at the head of a deep bay, having a narrow and dangerous entrance. According to governor Grey, the harbour of Akaroa is one of the best in the colony, and he farther says that its soil and climate are excellent. Although New Zealand is justly celebrated for the number and excellence of its bays and harbours, but little sagacity would appear to have been evinced by the early settlers in profiting by them; and it is probable that the great emporia of the islands will be founded hereafter in situations more accessible and better suited to shipping and navigation.

The total value of imports and exports of the colony was as follows in the years 1858-62:—

| Years | Imports | Exports |
|-------|-----------|-----------|
| | £ | £ |
| 1858 | 1,141,273 | 458,023 |
| 1859 | 1,551,030 | 551,484 |
| 1860 | 1,548,933 | 588,953 |
| 1861 | 2,193,811 | 1,370,247 |
| 1862 | 4,626,802 | 2,422,734 |

The commercial intercourse between New Zealand and the United Kingdom is shown in the subjoined tabular statement, which gives the total value of the imports of merchandise—exclusive of gold and specie—from New Zealand into the United Kingdom, and of the exports of British and Irish produce and manufactures to New Zealand in each of the years 1860-63:—

| Years | Imports from New Zealand into the United Kingdom | Exports of Home Produce from the United Kingdom to New Zealand |
|-------|--|--|
| | £ | £ |
| 1860 | 445,214 | 569,066 |
| 1861 | 541,357 | 865,827 |
| 1862 | 611,445 | 1,221,632 |
| 1863 | 740,397 | 1,971,438 |

The staple article of import from New Zealand into the United Kingdom is wool, of the average value of 500,000*l.* per annum. The exports comprise all the ordinary articles of British manufactures.

The following table shows the number of immigrants—the great majority from the United Kingdom—who arrived in the colony in the years 1860-62:—

| Provinces | Immigrants | | |
|---------------------|------------|--------|--------|
| | 1860 | 1861 | 1862 |
| Auckland | 2,954 | 1,559 | 4,036 |
| Taranaki | 38 | 27 | 11 |
| Wellington | 373 | 192 | 200 |
| Hawkes Bay | — | 15 | 15 |
| Nelson | 649 | 329 | 3 |
| Canterbury | 1,889 | 996 | 2,973 |
| Otago and Southland | 3,031 | 19,221 | 26,657 |
| Total | 8,935 | 22,339 | 34,290 |

When New Zealand becomes reasonably well-peopled, or has a pop. of one or two millions, she will probably be distinguished by her manufactures. Her geographical position, temperate climate, and the command of vast water power, of unlimited supplies of coal, iron, and the useful metals, and of timber, wool, flax, and other raw materials, give her almost unequalled advantages for the successful prosecution of manufacturing industry. Agriculture, however, including therein

the clearing of the land, mines, and fisheries, but especially the first, must for a lengthened period be the most advantageous business in which the colonists can engage.

New Zealand has been erected into a bishopric; and it has a numerous body of clergymen of various denominations, and of missionaries.

ZEITZ, a town of Prussian Saxony, reg. Merseburg, cap. circ., on the White Elster, here crossed by a stone bridge, 22 m. WSW. Leipsic, on the railway from Leipsic to Gera. Pop. 14,218 in 1861, exclusive of a garrison of 634. Zeitz is walled, is divided into an upper and lower town, and has a cathedral, and several other churches, various hospitals, two castles, one of which was formerly the residence of its princes, but now serves for a house of correction, a gymnasium, with a public library of 14,000 vols., and manufactures of cotton goods, earthenware, leather, and shoes; with cotton-printing establishments, breweries, and distilleries. It is the seat of the ordinary circle courts, of an ecclesiastical board, and of a Calvinist college. The gardens and grounds in its vicinity are celebrated for their neatness, and the attention bestowed on them.

ZEHL, or CELLE, a town of Prussia, distr. Lüneburg, on the Aller, where it receives the Fuse, and on the railway between Hanover and Lüneburg, 22 m. NE. the former. Pop. 14,139 in 1861. The town is well built and paved, and has Lutheran, Calvinist, and R. Catholic churches, an old castle once the residence of the dukes of Lüneburg, a large penitentiary, a medical college, Latin school, society of agriculture, and a famous royal breeding stud. Its inhabs. manufacture linen cloths, hosiery, flannel, and hats, and have a brisk transit trade both by the Aller and by land. Celle was long the seat of the high court of appeal for the former kingdom of Hanover.

Zell was the residence during the latter years of her life, of the unfortunate Matilda Queen of Denmark, and sister of George I. of England; and a monument to her memory stands in the palace garden.

ZERBST, a town of N. Germany, territory of Anhalt-Dessau, on a small tributary of the Elbe, 17½ m. SE. Magdeburg, on the railway from Magdeburg to Leipsic. Pop. 10,489 in 1861. The town is walled, and entered by 6 gates; has an old castle, several churches, one of which is among the finest structures of its class in Germany, two well-endowed charitable institutions, an orphan asylum, a house of correction, and a large school termed the *Franciscum*. It is the seat of the high court of appeal for the Anhalt and Schwartzburg principalities; and till near the end of last century it was the residence of the ducal family of Anhalt. It has manufactures of jewellery and earthenware. The Empress Catherine II. of Russia was a princess of Zerbst.

ZITTAU, a town of the kingdom of Saxony, circ. Bautzen, on the Mandau, a tributary of the Neisse, 50 m. ESE. Dresden, on the railway from Dresden to Vienna. Pop. 14,290 in 1861. The town is tolerably well built, and has numerous churches, a gymnasium, public library of 13,000 vols., house of correction, and various charitable institutions. It is the centre of the linen manufactures of Lusatia; and most of its inhabs. are occupied in the weaving of damasks, ticks, and other linen fabrics, or of cotton and woollen cloths; and in bleaching, printing, carding, and other auxiliary occupations. Zittau has also porcelain factories, paper-mills, and breweries, and a large trade in flax. It was the birthplace of the great orientalist, B. Michaelis.

ZOMBOR, a royal free town of Hungary, 20

Bacs, of which it is the cap., in an extensive plain near the Francis canal, uniting the Danube and the Theiss, 118 m. S. by E. Pesth. Pop. 23,580 in 1857. Zombor has several fine buildings, including a co. hall, town-house, several churches, barracks, and the government offices. Here, also, is a Greek ecclesiastical seminary, and a Roman Cath. high school, with some silk manufactures, and a considerable trade in corn, wine, and cattle.

ZUG, a canton, lake, and town of Switzerland, in the central part of the Confed. The canton, which is the smallest in Switzerland, is enclosed between the ter. of Zurich on the N., Schwytz on the E. and S., and a small part of Lucerne and Aargau on the W.; from which last it is separated by the Reuss. Area, 285 sq. m.; a considerable part of which is occupied by the Lakes of Zug and Egeri. Pop. 19,667 in 1860. Except a small plain to the N. of Zug, the surface is wholly mountainous, but the mountains do not rise to any great elevation; the highest, the Rossberg, on the S. border, being little more than 5,000 ft. above the sea. Principal rivers, Reuss, Sihl, which forms the NE. boundary, and Lortz, which brings the waters of the Egeri lake into that of Zug, and forms also the outlet of the latter towards the Reuss. The Lake of Zug, principally comprised in this canton, but partly in that of Schwytz, and intermediate in situation, as in character, between the Lakes of Zurich and Lucerne, is about 8½ m. in length, N. to S., by 3 m. in its greatest breadth. Its area has been estimated at about 10 sq. m., and the height of its surface above the level of the sea, at 1,385 Eng. ft. Its waters are of a very dark blue colour; and though near the town of Zug, its depth appears to be only about 200 ft.; at its S. extremity it is said to exceed 1,200 ft.

The banks of the Lake of Zug are well cultivated, richly wooded, and in general sloping, except on the S. and SW. sides, where the Righi and Rossberg rise abruptly from the water's edge. The lake abounds with fish, the taking of which forms an important occupation of the inhabs. of its vicinity. Some indifferent wine, with cider, are made, and considerable quantities of apples and other fruits are grown for exportation; but the principal employment of the pop. is cattle breeding. A few silk and cotton fabrics are woven, cotton yarn is spun, and at Zug, Cham, and Baar are some tanneries and paper-mills; but the manufactures of the canton are comparatively insignificant. The government is strictly democratic. The cantonal council is composed of 54 deputies, elected for two years by all the male citizens of the canton above the age of 19 years, who are not bankrupt, pauper, or under penal condemnation. This council exercises all the ordinary administrative functions. The legislative power is exercised by the *triple council*, composed of the cantonal council and two additional mems. for each deputy, chosen, like the deputies, triennially by the communes. The general assembly meets annually in May: its *landammann* or president being taken alternately from the two circles into which the canton is divided. The deputies are paid for their services, at such rates as can be afforded by the communes which send them. The chief criminal tribunal consists of 25 mems., and the ordinary civil tribunal of 6 assessors and the *statshalle*: the latter becomes a final court of appeal by the addition of 6 mems. chosen annually by the cantonal council. Civil causes below the amount of 12 francs, misdemeanours, and other matters of minor importance, are decided by the communal assemblies and tribunals. There is no tax of any kind in the canton. The public expenditure of the canton amounted to 160,000 francs, or 4,640L.

in 1862. Zug furnishes a contingent of 250 men to the army of the Swiss Confed.

Zug, the cap., on the NE. side of the lake of the same name, 15 m. S. Zurich, on the railway from Zurich to Lucerne, had 3,854 inhabitants in 1860. The town is pleasantly situated, and has several good churches, to one of which is attached a curious *golgotha*, containing many hundreds of skulls, each labelled with the name of its original possessor.

The people of this canton are of a German stock, and for the most part similar to those of Schwytz, though less ignorant and superstitious. They are all Roman Catholics.

ZURICH (CANTON OF), a canton of Switzerland, ranking second in the Confederation, and being superior also in pop. and importance to most of the other cantons. It extends between lat. 47° 10' and 47° 40' N., and long. 8° 20' and 9° E.; having E. Thurgau and St. Gall, S. the Lake of Zurich and the cant. Zug, W. Aargau, and N. Schaffhausen and Baden, from which it is partly separated by the Rhine. Length, N. and S., about 30 m.; greatest breadth, 25 m. Area, 685 sq. m. Pop. 267,641 in 1860; the inhabs. are nearly all Protestants. Surface generally undulating; and, though picturesque, it presents none of those grand natural features which arrest the traveller's attention in the cantons further S. Several mountain, or rather hill ranges, enter Zurich, but the highest summit, the Hörnli, near the E. border, scarcely rises to 3,800 ft. above the sea. After the Rhine, the principal rivers are its tributaries, the Limmat, which drains the lake of Zurich, Thur, Toss, and Sihl, with the Reuss forming a part of the W. border. Of these, however, only the Limmat is navigable. The Greiffen, famous for its fine eels, and several smaller lakes, are in this canton. Climate mild; the mean annual temp. at Zurich is about 48½° Fah. Nowhere in the canton is the ground perpetually covered with snow; and the soil is in general productive. Agriculture is perhaps better conducted in this than in most other parts of Switzerland; manuring is well understood; and irrigation is successfully practised. An English traveller says 'Anywhere in the neighbourhood of Zurich, one is struck with the extraordinary industry of the inhabs.; and if we learn that a proprietor here has a return of 10 per cent., we are inclined to say, "he deserves it." It is impossible to look at a field, a garden, a hedge, scarcely even a tree, a flower, or a vegetable, without perceiving proofs of the extreme care and industry that are bestowed upon the cultivation of the soil. If, for example, a path leads through, or by the side of a field of grain, the corn is not, as in England, permitted to hang over the path; but is everywhere bounded by a fence. If you look into a field towards evening, where there are large beds of cauliflower or cabbage you will find that every single plant has been watered. In the gardens, which, around Zurich, are extremely large, the most punctilious care is evinced in regard to the culture of every product.'

The labouring classes in this canton are almost universally proprietors of the small farms and cottages which they cultivate and inhabit. The corn grown is insufficient for the pop., but great quantities of fruit and garden vegetables are raised. The vine is generally cultivated. But though improved the wine is still very inferior. The pasture lands are not extensive; and no great quantities of farm stock are reared: a very large breed of cattle is however produced by a cross between those of this canton and those of Schwytz. Some iron, coal, and salt, are met with; but mining industry is not of much consequence.

Zurich is one of the principal manufacturing cantons of Switzerland; its inhabitants generally dividing their attention between the labourers of agriculture and those of the loom. 'I have seldom entered,' says Dr. Bowring (Commercial Reports), 'a rural dwelling without finding one or more looms in it, employed in the weaving of silk or cotton. If the labours of the field demand the hands of the peasant, his wife or children are occupied in manufacturing industry. When lighter toils suffice for the agricultural part of the family exertions, the females and the young people resign the loom to the father or the brothers. The interstices of agricultural labour are filled up by manufacturing employment; and in more than half of the operations of Zürich the farmer and the weaver are united.' Cotton and silk fabrics are those principally produced. The silk fabrics consist of Florentines, gros de Naples, marcelines, taffetas, levantines, handkerchiefs, crapes, shawls, and velvets. Early in the present century about 5,000 looms were employed upon these goods; but since the peace they have rapidly increased. The disturbances at Lyons, in 1834, were the cause of many Lyons' workmen settling in Zürich. The annual value of the total produce of the silk-loom has been estimated at 600,000*l.* sterling. The cotton manufactures of Zürich had their origin in the 5th century, their two principal seats being then, as now, Zürich and Winterthur. There are said to be about 12,000 cotton weavers in the canton, and 4,000 persons engaged in other trades connected with the cotton manufacture, producing annually 800,000 pieces of cotton. Cotton spinning is also extensively carried on; but the other manufactures are not of very great importance. The woollen trade does not employ 300 hands, and the linen manufacture is now almost wholly extinguished. The imports of Zürich mainly consist of cotton and cotton yarn, woollen cloths, colonial products, bark, straw hats, linens, furs, glass, stationery; wheat, principally from Swabia; wine, brandy, fruits, tobacco, fir-wood, raw silk, butter and cheese, and minerals. The exports are cotton cloths, particularly Turkey reds; silk goods, chiefly plain; machinery, tanned leather, kirschwasser, and sometimes an excess of agricultural produce to the neighbouring districts.

The constitution of Zürich underwent a great change in 1831. The cantonal assembly, or greater council, still consists, as formerly, of 212 mems. but instead of 130 being elected by the grand council itself, only 33 are now so nominated, the remainder being chosen by the different guilds, and the pop. at large. Every male above the age of 19, not a domestic, a bankrupt, a recipient of public relief, or under penal condemnation, has a right to vote in the election of representatives: citizens must, however, be 30 years of age to sit in the chamber. The mems. of the greater council are elected for four years; but half their number goes out biennially. By the new constitution, the executive and judicial powers, formerly united in the same individuals, are separated; the functions of the former are exercised by a body of 19 mems. chosen by the greater council, and those of the latter by a high court of appeal composed of 11 mems., a criminal court of primary jurisdiction in Zürich and district courts. The proceedings of the council and of the law courts are public; freedom of trade and of the press is guaranteed; and each individual contributes to the exigencies of the state in proportion to his income. The cantonal government compels a general system of insurance against fire, being itself the insurer. Public revenue, 2,862,000 fr., in 1862. Zürich has no public debt. The canton

contributes 3,858 men to the army, and 77,153 fr. a year to the treasury of the Swiss confederation.

ZÜRICH (an. *Turicum*), a town of Switzerland, cap. of the above canton, on the Limmat, at its efflux from the NW. extremity of the Lake of Zürich, 58½ m. NE. Bern, on the railway from Bern to St. Gall. Pop. 19,758 in 1860. Zürich is beautifully situated, the river dividing it into 2 parts, which are connected by 3 bridges; and considerable improvements are going on in the town. It has some fine public walks, but few public buildings are worth notice. The principal are the cathedral, a massive edifice of the 10th or 11th century, in which Zwinglius denounced, though in comparatively mild and measured terms, the errors of the church of Rome, and enforced the principles of the Reformation; St. Peter's church, of which Lavater was the minister; the town hall, a square edifice, in which the diet meets; the old arsenal, the town library, a spacious edifice, containing about 60,000 volumes, with portraits of Zwinglius and many of the burgo-masters of Zürich, a bust of Lavater by Dannecker, a bas-relief model of a great part of Switzerland, and a collection of fossils. In the middle of the Limmat stands the tower of Wellenberg, formerly a state prison.

The principal manufactures are those of silk and cotton goods, and numerous factories and country houses stud the banks of the lake in the environs. 'In Zürich,' says an English traveller, 'it is all work and no play; there are no amusements of any kind, nor probably do the inhabs. feel the want of them. There is no theatre; there are no public concerts; balls, in a canton where leave to dance must be asked, are out of the question. The great object of the Zürichers is to get money: distinction in wealth is the chief distinction of rank known in Zürich. Literature, however, has kept its place here; and nowhere, perhaps, in Europe is the study of the classics more general than in this city. Here are an academy for theology and various other branches of philosophy; another academy preparatory to the former; an institution for medicine and surgery; another for the education of merchants; an institution for the instruction of the deaf and dumb, and for the blind, the model of which was considered so excellent, that upon it Napoleon formed that of Paris; academies of artists and music; a society of public utility; and many schools for instruction in languages and for the education of the poor.' Zürich was one of the earliest cities that joined the Swiss Confederation; and here the Reformation in Switzerland commenced, under Zwinglius, in 1519. Among its distinguished natives have been the two Gessners, Zimmermann, Fuseli, Lavater, Bodmer, and Pestalozzi.

ZÜRICH (LAKE OF), one of the principal lakes of Switzerland, in the E. part of which it is situated, being bounded by the cantons of Zurich, Schwytz, and St. Gall. It curves in a semicircular manner, from SE. round to NW. Length, about 24 m.; breadth, varying to about 3 m.; but at Rapperschwyl it is contracted to less than ½ m. and is crossed there by a wooden bridge. Area, estimated at about 23 sq. m.; height above the sea, 1,362 English ft. Its depth in some places exceeds 600 ft.; but for several hundred yards from its bank it is (near Zürich at least) seldom more than from 6 to 12 ft. in depth. At its SE. extremity it receives the Linth canal, which brings to it the superfluous waters of the Lake Wallenstadt; at its NW. extremity it discharges itself by the Limmat. Zürich, Meilen, Rapperschwyl, and Richtenschwyl, are on its banks. This lake has

none of that savage sublimity which characterises most of the Swiss lakes: its scenery is, in fact, comparatively tame. It has been called 'the Winandermere of Switzerland.' The hills around it scarcely rise to 3,000 ft. above the sea, and they descend in gentle and cultivated slopes to the water's edge; where the banks, from one end of the lake to the other, are studded with villages, country houses, and other habitations. Good carriage roads run along both sides of this lake; and it is daily traversed by steamers between Zürich and Rapperschwyl.

ZUTPHEN, a fortified town of the Netherlands, prov. Guelderland, cap. arrond., on the Yssel, crossed here by a stone bridge, where it is joined by the Birckel, 15 m. NE. Arnhem, on the railway from Arnhem to Groningen. Pop. 13,728 in 1861. The town is strong by its situation, and, though in the midst of fens, is not considered unhealthy. It is divided by the Birckel into an old and a new town. The principal church is an old and stately edifice: the town-hall, the college of deputies, and the palace of the former counts of Zutphen, are the other most conspicuous buildings. Here, also, is a Latin school, a society of physical science, a court of primary jurisdiction, manufactures of cotton fabrics, with tanneries, paper, and glue factories, oil and flour mills.

Zutphen was one of the Hanse towns. It was taken and pillaged by the Spaniards in 1572 and 1588, but was retaken by the troops under prince Maurice in 1591. In this siege the famous Sir Philip Sidney, the flower of the chivalry of Elizabeth's reign, received a wound of which he died on the 17th of Oct., at the early age of 32.

ZVORNIK or **ISVORNIK**, a fortified town of Bosnia, cap. sandjak, on the Drin, 72 m. WSW. Belgrade. Pop. estim. at 15,500 in 1862. The town is situated on a rocky height, and has two castles, and a large collection of mud houses, with several mosques, and Greek and Roman Catholic churches. It has a considerable trade in timber and fuel with Belgrade and Semlin; but from its lying out of any great road, it is very seldom visited by travellers from W. Europe.

ZWICKAU, a town of the kingdom of Saxony,

cap. circ. of its own name, on the Mulda, 58 m. SW. Dresden, on the railway from Dresden to Nuremberg. Pop. 22,432 in 1861. The town was formerly strongly fortified, and suffered repeatedly in the wars of last century between Austria and Prussia. Its principal buildings are St. Mary's church, with some fine paintings by Wohlgemuth, a lofty tower, which was often ascended by Luther; and an old castle, now used for a house of correction. The gymnasium has a library of 18,000 volumes; and there are also some military store-houses. Zwickau has manufactures of woollen cloths, hosiery, cotton goods, and hardware; which she owes to the coal-fields on both sides the Mulda, in her vicinity.

ZWOLLE, a fortified town of the Netherlands, prov. Overijssel, of which it is the cap.; on the Zwarte-water, about 10 m. from the Zuyder-zee, and 50 m. ENE. Amsterdam, on the railway from Utrecht to Groningen. Pop. 19,251 in 1861. Zwolle is well built, in the style of most other Dutch towns; and has several suburbs, 8 churches, including a fine old cathedral, a house of correction, tribunals of primary jurisdiction and commerce, and some agreeable promenades in the vicinity. It was formerly one of the Hanse towns, and its trade is still considerable in cattle and other live stock, dried fish, corn, wool, hides, honey, and leather. It has some salt and sugar refineries, and tanneries. It was taken by the Dutch in 1580. The famous Thomas-a-Kempis was, for 64 years, a monk of an Augustinian priory in this town, where he died in 1471.

ZYTOMIERS, or **JITOMIR**, a town of Russian Poland, government Volhynia, of which it is the capital; on a tributary of the Dniestr, 75 m. WSW. Kief. Pop. 31,275 in 1858. The town has 3 Russo-Greek, a Lutheran, and 2 R. Cath. churches, various government buildings, a gymnasium, seminary, and public library. It has increased greatly in importance since it came into the possession of the Russians; it has manufactures of hats and leather, and a considerable trade in woollen, silk and linen fabrics, honey, wax, salt, and wines, chiefly with Galicia, Hungary, and Wallachia.

THE END.

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